Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 000323290

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service):

Location(s) Applied to: Anchorage, AK(US); Boise, ID(US); Lacey, WA(US); Portland, OR(US);

Seattle, WA(US)

Series Applied To: 0401

### <u>Resume</u>

Country of Citizenship: United States

Highest Grade: 13

Work Experience: United States Department of Agriculture

01/2022 - Present

1400 Independence Ave., S.W. Washington DC, DC 20250 US

Hours per week: 40

This a time-limited appointment or temporary promotion

#### Agricultural Specialist

I support the USDA Agricultural Attache and Agricultural Minister Counselor at the U.S. Mission to the UN Rome. I advise the Attache and Minister Counselor on several aspects of the agricultural programs in the United Nations system, with a specific focus on the Food and Agriculture Organization. I assist with the development of the the U.S. Mission's strategic plan for engaging the UN Rome Based Agencies. I proactively plan, oversee, and participate in the full range of reporting, representational, and programmatic related activities. I deliver U.S. Government statements and engage in negotiation with other diplomats on behalf of the U.S. Government. I coordinate with a very diverse group of industry, private sector, NGO, and governmental partners to achieve U.S. interests. I liaise with International Plant Protection Convention senior staff at FAO, and I am very familiar with the delicate subject of Sanitary and Phytosanitary (SPS) and Related Non-Tariff Barriers to Agricultural Trade and the importance of these measures to protecting agriculture and food systems. Additionally, I assign projects to interns in our office, set clear expectations for the work desired, and oversee the thorough and timely completion of these projects.

New Zealand Environmental Protection Authority 01/2020 - 05/2020 215 Lambton Quay Level 10 Hours per week: 40 Wellington, N NZ

#### Advisor

- Provided management consulting-style evaluation of the organization's risk assessment methodology - I advocated for actions that, if implemented, would maximizing the scientific rigor and quality of risk assessment analyses. I supported the organization's long term priority of making in-house risk calculation tools and equations transparent and publicly available, and identified qualified peer reviewers for this transparency effort.

- Developed risk assessment strategy for a high profile pesticide proposed for New Zealand registration

U.S. National Park Service 09/2019 - 11/2019 20 McFarland Hill Drive Bar Harbor, ME 04609-0177 US Hours per week: 40

Supervisor: Alexa Pezzano (207-288-1320) Okay to contact this Supervisor: Yes

#### Education Intern (volunteer)

Each spring and fall, the National Park Service and Schoodic Institute partner to deliver the Schoodic Education Adventure program, an environmental education curriculum designed for middle school students. I taught modules in a variety of subjects ranging from marine chemistry to geology for students participating in these week-long residential programs. I presented science lesson modules to groups of middle school students and communicated the program schedule to students and their chaperones. I gained certification in first aid and CPR as part of this internship.

U.S. Department of State 12/2018 - 05/2019 2201 C Street Northwest Washington DC, DC 20006 US

Hours per week: 40

Series: 0119 Pay Plan: GS Grade: 09

Supervisor: Chris Hunnicutt ((+263) 86 7701 1636)

Okay to contact this Supervisor: Yes

#### Economic (ESTH) Assistant

After a half year coverage gap, and in a section with little institutional knowledge, Nathan took over the environment, science, technology, and health (ESTH) portfolio. He was able to operate independently, seeking out ESTH policy resources within the State Department and other agencies, reestablishing embassy contacts, and determining the best way to approach neglected mission priorities, notably wildlife trafficking. Furthermore, he was able to quickly understand, and contribute to, overarching mission goals by providing substantive input into the Mission's Integrated Country Strategy, which we began working on just as Nathan started. In addition to reporting, he has sought solutions to longstanding issues and ways to improve Zimbawe's environmental management. This has broader ramifications for the U.S.-Zimbabwe relationship. After years of poor relations, we currently have the government's attention and are pushing for broad political and economic reforms. Nathan has uncovered a number of potential rewards, such as establishing a national parks "sister parks" relationship, and assistance to the police for the prevention of wildlife trafficking at airports, which could both incentivize reforms, and promote Mission goals in their own right. While Nathan's time in the office was too short to see these potential projects through, he has created a toolkit for the Mission going forward. Nathan has proved effective in quickly developing core skills needed in any political and economic section. He served as control officer for our visiting desk officer's week long visit, arranging a busy schedule and earning well-deserved praise from

Washington. He has engaged with the Government of Zimbabwe (GOZ) direcly, both for a formal demarche and for Post's independent reporting. He has written concise, effective cables that not only report facts but advocate for policies that would advance the Mission's priorities. When the Government of Zimbabwe (GOZ) temporarily shut down social media services, Nathan reached out to major U.S. social media firms to ensure the GOZ did not inappropriately target the accounts of political activists and protesters. While our fears proved unfounded, Nathan showed he was able to quickly and successfully navigate unfamiliar territory, identify the right points of contact, and convey Zimbabwe's strange circumstances to U.S. private sector contacts. Finally, Nathan has been a great member of the pol/econ team. He has a positive attitude, and has a great rapport with his coworkers. -EPR draft prepared by Chris Hunnicutt on April 2, 2019

U.S. Fish and Wildlife Service 01/2017 - 10/2017 5275 Leesburg Pike, 2N035 Baileys Crossroads, VA 22041 US

Hours per week: 40

Series: 1801 Pay Plan: GS Grade: 07

#### Wildlife Inspector

• Inspected a wide variety of wildlife shipments to ensure compliance with U.S. and international law while working collaboratively with other federal officers to secure U.S. Borders. • Assisted with the care, transport, and chain-of-custody of live wildlife intercepted following attempted smuggling.

U.S. Environmental Protection Agency

01/2016 - 04/2016

1200 Pennsylvania Avenue, N.W. Washington DC, DC 20001 US

Hours per week: 40

Series: 1801 Pay Plan: GS Grade: 13

This a time-limited appointment or temporary promotion

Supervisor: Jennifer Lynn (202) Okay to contact this Supervisor: Yes

#### Criminal Research Specialist

• Competitively selected for a developmental assignment to assist with complex, white collar criminal investigations. • Organized, reviewed, and digitally catalogued tens of thousands of pages of digital and physical information associated with active criminal investigations that enabled the US Attorney's office to expedite prosecutorial review. • Analyzed all open criminal investigations to compile a victim list responsive to a US Department of Justice directive, allowing EPA to quantitatively evaluate program impact via a new metric. • Assisted with casework spanning multiple environmental statutes including the Clean Water Act (CWA), National Pollutant Discharge Elimination System (NPDES), TSCA, and FIFRA.

U.S. Environmental Protection Agency

05/2010 - 01/2017

1200 Pennsylvania Avenue, N.W. Washington DC, DC 20460 US

Hours per week: 40

Series: 0401 Pay Plan: GS Grade: 13

Supervisor: Mark Corbin (+1 703 605 0033) Okay to contact this Supervisor: Yes

#### Biologist

- Reviewed ecotoxicology studies and authored environmental risk assessments to support registration decisions for pesticides, and characterized risk assessment uncertainties for risk managers and agency officials. - Prepared ecological risk assessments compliant with the Federal Food Drug and Cosmetic Act (FFDCA) and Food Quality Protection Act (FQPA). -Evaluated incident reports and the assessed strength of available scientific data as a case development partner to EPA's Office of Enforcement and Compliance Assurance for the Imprelis® civil enforcement case that resulted in a \$1.853 million settlement, the third highest civil penalty in the history of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). - Coordinated a workshare agreement with the California Department of Pesticide Regulation, trained a project team of five staff scientists, and added aquatic hazard information for more than 250 pesticides to a public EPA webpage that provides centralized access to toxicity data. These benchmarks complement Water Quality Standards. - Coordinated with scientists in the Office of Chemical Safety and Pollution Prevention Office of Toxics to harmonize regulatory requirements for pesticides and toxic substances regulated under the Toxic Substances Control Act (TSCA). - Participated in a Kaisen LEAN process efficiency workgroup focused on streamlining and improving the quality of the registration review process in EPA's Office of Pesticide Programs. - Liaised with OECD Personnel to add the US EPA's Aquatic Life Benchmarks for Pesticides data to the OECD's eChem portal. Recognition: - US EPA Office of Enforcement and Compliance honor award for regional excellence in enforcement, 2014. - US EPA Office of Pesticide Programs team award for OCSPP 850 quideline finalization effort, 2016.

Education: Juniata College

Huntingdon, PA US

Bachelor's degree - NaN/0011 Major: Environmental Science 9+ years of leadership experience and program management in multiple and complex programs including Engineering, Contracting, Construction Management, Training & Development, Manpower, Emergency Management and Operations. Proficient at understanding strategic mission objectives and aligning program and project development initiatives to achieve stated goals. Motivated, self-sufficient, and experienced multi-tasking individual. Extensive experience in managing engineering and construction contracts, conflict resolution, complex work environments, strategic planning, collaboration, and Public Works Department Development.

#### **CORE COMPETENCIES**

- Value Engineering
- Root Cause Analysis Professional
- Process Improvement
- Military Operations

- Innovative Leadership
- Program Management
- Facilities Optimization
- Vendors Relations
- Contract Management
- Regulatory Compliance
- Interpersonal Skills
- Financial Management

#### PROFESSIONAL EXPERIENCE

# U.S. ARMY CORPS OF ENGINEERS (USACE)

Project/ Program Manager

12/2020 - Present Seattle, WA

Providing expert project management for overall planning, execution, control and closure to projects of high dollar value of national priority, of environmental sensitivity, of extraordinary urgency, or having similar requirements. Leads multi-disciplinary project delivery teams (PDTs) and manages resources in planning, engineering, acquisition, construction, real estate and other supporting activities with decision authority to meet project objectives. Managing scope requirements, schedules, and construction budgets for multiple projects. Independently initiates project directives, reports, conferences, etc., and represent the organization in negotiations. Assists in the development of other project management professionals through mentoring, training, and review of work products. Manages all aspects of project initiation and planning in accordance with the USACE Project Delivery Business Process. Gains and maintains approval of project management plans from District and/or Division leadership.

#### NAVAL FACILITIES ENGINEERING COMMAND MARIANAS

Production Officer/ Liaison Officer

06/2018 – 12/2020 Guam

PROGRAM MANAGEMENT: Orchestrated time and politically-sensitive regional project executions to ensure adherence to performance, cost, schedule, and deliverables throughout the life of the projects. Integrated all functions, stakeholder objectives and other agencies commitments in support of assigned projects into a comprehensive management plan. Perform risk assessments and analysis to identify methods of reducing and mitigating risks associated with construction projects. Plans work to be performed by subordinates, sets and adjusts priorities, and prepares schedules for work completion. Collaborated and assisted with other managers who have been assigned projects within the program area with funding needs, stakeholder concerns, and procedural advice. Represented the Naval Facilities Engineering Command Marianas (NAVFAC) Contracting Officer (KO) on Architectural and Engineering Services (A/E), Construction Management, and Construction contracts as the Contracting Officer's Representative (COR) and exercises delegated authority from the KO reviewing, inspecting, and directing work as it proceeds in compliance with contract requirements.

#### **JOINT REGION MARIANAS**

Crisis Action Team (CAT), Emergency Mgt. – Collateral Duty

06/2018 - 03/2019

Guam

OPERATIONAL LEADER: Managed day to day operations and developed and executed future planning and scheduling as Logistics Section Chief. Handled administration of the Regional Operations Center (ROC) and current operations, across multiple agencies and programs such as Force Protection, Emergency Management, Fire Protection, Explosive Safety, and ROC Operations. Developed local policies and procedures for ROC operations such as communications plans, critical information reports, and request for information/support (RFI/RFS) procedures, training requirements, and other various operational reports. Delivered daily reports to leadership on local and external events triggering Commander's Critical Information Report (CCIR) policy and taking further actions as required. Established monthly and annual programs and manages them for the timely execution of all requirements.

#### NAVAL BASE GUAM, PUBLIC WORKS DEPARTMENT

02/2016 - 06/2018

Assistant Public Works Officer

Guam

RESOURCES MANAGEMENT: Managed regular and emergency issues with facilities service contracts, construction contracts, utility outages, and service work requests to ensure they are resolved on timely manner. Supported clients' request and as activities directly related to Military Construction (MILCON) and Facilities Sustainment, Restoration and Modernization (FSRM) projects/programs. Provided technical and administrative supervision for the assigned administrative and technical staff. Coordinated with the customers and provide support to the Facilities Engineering and Acquisition Division (FEAD) through the Work Induction Board (WIB) to determine the best method to acquire or construct the requested work using a contracting authority tool that provides the best value to the Government and supports the work requirements. Developed, carried out, and advised tenant commands on public works department policies, procedures, and plans. Conducted technical reviews of facilities planning products (i.e., Basic Facilities Requirements [BFRs], Facilities Support Requirements [FSRs]) to determine if objectives are met while leading multidisciplined project delivery teams. Processed space management requests and site approval processes for the Installation.

#### NAVAL MOBILE CONSTRUCTION BATTALION FIVE

Detachment Officer in Charge (Det OIC)

06/2014 – 02/2016 Port Hueneme, CA

ORGANIZATIONAL ENGAGEMENT: Managed day to day operations of multiple divisions in Administration, Engineering, and Operations. Planned and executed daily operational requirements and maintenance. Reported to senior leaders on personnel administration, operational needs, training conducted, and future planning. Developed and reviewed daily command administration reports to include military awards management, performance management, directives, plan of the day, and correspondence. Tracked, delegated, and initiated all internal and external tasks from organizational leadership and higher. Closely monitored field exercises process cycles and trained personnel on project execution best practices available in expeditionary environment.

PERFORMANCE MANAGEMENT: Deployed to Japan in support of 2015 PACOM mission. Conducted construction, equipment maintenance, security, and convoy operations. Led redeployment effort from Okinawa to Yokosuka, moving more than 100+ pieces of construction and transportation equipment's throughout the theater. Began several high visibility construction projects to include the Seawall repair, and Pre-Engineered Building (PEB) at Naval Base Yokosuka, Japan. Established forward operation details throughout the area to support execution of several other projects with total \$5M in value. Supervised 25+ Seabees, developed clear and specific performance objectives and required duties, and recognized their results through performance management. Ensured all training requirements were completed and all personnel were deployment ready prior to deployment cycles.

#### NAVAL SUPPORT ACTIVITY BETHESDA

Project/ Construction Manager

05/2012 – 06/2014 Bethesda, MD

PERFORMANCE MANAGEMENT: Managed project funding and reporting requirements, including congressional Military Construction (MILCON) projects totaling more than \$100M. Enjoined division of 60+ civilians contracting and engineering personnel in project award, administration, engineering, and quality& safety assurance for more than 40 projects with value more than \$300 M. Prepared statements of work using the Facility Planning Documents (FPD) system to set pricing and work expectations for vendors. Monitoring contractor performance for compliance with terms and conditions of contracts. Served as command point of contact on appropriate use of Design Build (DB) and Design Bid Build (DBB) acquisition strategies, as well as in-house execution to maintain competencies. Prepared contracting documents (e.g., solicitation documents and justifications, acquisition plans, source selection plans, final contract specifications, recommendations for pre-award and post-award reasons for decisions) to justify contractual costs or negotiation decisions. Evaluated engineering and architectural items (e.g., designs, drawings, specifications, supporting documents) to determine effectiveness in meeting requirements of shore establishment projects.

PLANNING & SCHEDULING: Conducted asset evaluation of facilities to formulate a facilities requirement plan. Conducted planning functions involving MILCON requirements. Developed, maintained, and provided scheduling training to local field office and respective personnel covering basic understanding of network analysis schedules, critical path method, time impact analysis, baseline, progress, etc. Reviewed the contractors' Time Impact Analysis proposal regarding affected activities on the critical path and helped to develop the Governments' position regarding delays and/or liability. Monitored and managed project milestones and budgets from planning through construction and initial operations.

BUDGET EXECUTION: Performed all aspect of management roles for the project (scope, cost, and schedule) from preliminary design authorization to project closeout. Evaluated price, terms, and conditions as well as preparation of price negotiation memorandums pursuant to limitations and scope of basic contracts or agreements.

#### **EDUCATION**

**Boise State University** 

Boise, ID

**Degree:** B.S - 05/2010 **Major:** Civil Engineering

University of Washington

Seattle, WA

**Degree:** M.S – 12/2020 **Major:** Civil Engineering

#### PROFESSIONAL RELATED TRAINING, QUALIFICATIONS & CERTIFICATIONS

Project Management Professinal (PMP)

CMIT (via Construction Manager Association of America)

Defense Acquisition Workforce Improvement Act (DAWIA) at Level II

Public Works Personal Qualification Standards (PQS) at Level II

Career Field Facilities Engineering at Level II

Contracting Officer Representative (COR)

Engineer in Training (EIT)

April 2022

March 2020

February 2019

September 2017

August 2016

January 2014

May 2011

<sup>\*</sup> A full list of DoD training, qualifications, and certifications will be provided upon request.

Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 002729567

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service):

Location(s) Applied to: Lacey, WA(US); Portland, OR(US)

Series Applied To: 0401, 1301

#### Resume

Country of Citizenship: United States

Highest Grade: 11

Availability: Job Type: Permanent

Detail

Work Schedule: Full-time

Work Experience: Eldorado National Forest

11/2007 - Present 100 Forni Road

Salary: \$86,903.00 USD Per Year

Placerville, CA 95667 US

Hours per week: 40

Series: 1315 Pay Plan: GS Grade: 11

Supervisor: Randy Striplin ((707)373-1009)

Okay to contact this Supervisor: Yes

#### Hydrologist

• Serving as Climate Change Coordinator. Promoting climate change-related initiatives including vulnerability assessments, climate adaption plans, carbon white papers, and environmental justice efforts. Engaging in communities of practice: Climate Data, Climate Adaptation, and Climate Change Integration Team. • Serving as Sustainable Operations Point of Contact. Establishing Forest Green Team with initial program focus on Greening Fire and integration of sustainability considerations into facilities management. • Integrating watershed program considerations into development of Forest and Regional strategies. Briefing leadership on new and revised policy directives and program initiatives from higher authorities. Providing hydrology expertise on Forest Ecological Restoration Strategy and Forest Resilience Strategy. Recommended revisions to directives as a team member working on updates of Regional Water Quality Management Handbook, Regional Cumulative Watershed Effects Policy, and Regional Water Rights Handbook. • Providing extensive hydrology support for four existing Federal Energy Regulatory Commission hydropower projects, including one recent relicensing, and three proposed pumped-storage

projects. Engaging in instream flow negotiations, development of environmental studies, and writing of license conditions. Reviewing and recommending modifications on expertlevel licensee plans and reports addressing: Water Quality Monitoring, Temperature Monitoring, Stream Restoration and Stabilization, Spillway Stabilization, Geomorphology Monitoring, Groundwater Monitoring, Streamflow and Reservoir Storage Gaging, Emergency Release Points, Hazardous substances, Integrated Pest Management, Noxious Weeds, Recreation Implementation, and Transportation System Management. Working cooperatively with hydropower stakeholder and technical working groups. Incorporating climate change considerations into hydropower licensing. • Coordinated the Forest's Watershed Improvement Program including leading watershed condition assessment efforts and watershed restoration action plan development. Forty-three 6th-field watersheds assessed, and two Watershed Restoration Action Plans written. Authoring grant and other funding proposals to finance watershed and aquatic restoration projects. Successfully funded projects have included meadow restoration, road improvements, erosion remediation, aquatic organism passage, and ecological restoration. Individual efforts ranged from approximately \$75k to \$450k in funding obtained. • Managed the unit Regional Best Management Practices Evaluation, National Best Management Practices Evaluation, and Timber Harvest Waiver programs. Headed Forest efforts to consistently implement adopted timberland management permit with over 35 Forest projects initially enrolled and numerous projects subsequently enrolled. • Conducted National Environmental Policy Act analysis. Completed hydrologic surveys and analysis as a member of numerous interdisciplinary teams on assignments including timber management, road management, mining, recreation, vegetation manipulation, fuels management, watershed management, and range management projects. Provided hydrology and soils expertise on several Regional Appeal and Objection Review Teams for Forest Service and joint Forest Service-Bureau of Land Management Projects. • Organized trainings for agency staff. Conceived and implemented a multi-agency workshop that trained 50+ State and Federal employees on Clean Water Act Permitting, the California Environmental Quality Act, and the National Environmental Policy Act. Facilitated implementation of two multi-Forest Best Management Practices program trainings. • Provided leadership for permit development efforts. Functioned as a Core Team Member, and subsequently Central Zone Representative, during five years of participation on a Regional Water Board nonpoint source permit development effort for roughly 11 million acres of federal lands managed by the United States Forest Service and Bureau of Land Management that proposes regulating: timber harvest and vegetation management, transportation management, recreation facilities management, wildfire management and recovery, and restoration activities. Served as one of three Forest Service team members that worked with Regional Water Board staff on a successfully adopted nonpoint source permit for timberland management covering approximately 16 million acres of federal and non-federal forested land. • Represented the Forest on stakeholder-focused efforts including development of one Integrated Regional Water Management Plan, two Total Maximum Daily Load efforts for mercury, and various drought management efforts. • Refined budget, capability, and work plans as a member of the Forest Financial Working Group. • Served as Acting Natural Resources Staff Officer for the Forest Watershed, Wildlife, Aquatics, Ecology, and Timber programs.

Black Hills National Forest 10/2005 - 11/2007

121 South 21st Street, Sundance Salary: \$45,189.00 USD Per Year

Sundance, WY 82729 US Hours per week: 40

Series: 1315 Pay Plan: GS Grade: 9

#### Hydrologist

• Zone Hydrologist for two districts covering territory in two states. • Provided hydrology and soils input as a member of interdisciplinary teams working on timber, fuels, range, minerals, recreation, and engineering projects. • Wrote hydrology and soils

specialist reports for inclusion in NEPA documents and reviewed specialist reports written by contractors. • Developed and implemented a hydrology and soils field program. • Hired and supervised seasonal crews conducting stream health, connected disturbed area, soil disturbance, slope stability, and aquatic organism passage surveys for a high volume of projects.

Sierra National Forest 10/2003 - 10/2005 29688 Auberry Road

Salary: \$33,071.00 USD Per Year

Prather, CA 93651 US Hours per week: 40

Series: 1316 Pay Plan: GS Grade: 7

This a time-limited appointment or temporary promotion

#### Hydrologist Technician

Dates of employment: 05/05 to 09/05, 05/04 to 10/04, and 6/03 to 10/03 • Trained and led hydrology field crews. • Planned and conducted Watershed Improvement Needs (WIN) surveys, V\* surveys, Stream Condition Inventories, Best Management Practices Evaluations, and stream flow measurements. • Wrote reports detailing Watershed Improvement Needs and suggested priorities.

Tongass National Forest 05/2002 - 08/2002

204 Siginaka Way

Salary: \$28,342.00 USD Per Year

Sitka, AK 99835 US Hours per week: 40

Series: 1316 Pay Plan: GS Grade: 7

This a time-limited appointment or temporary promotion

#### Hydrologic Technician

• Carried out Upstream Habitat Assessments and Road Condition Surveys to prioritize rehabilitation of fish passage at culverts. • Assisted with weir construction, fish passage monitoring, and fish netting & transport.

USFS Redwood Sciences Laboratory, Watershed Research Unit

07/2000 - 05/2002 1700 Bayview Drive

Salary: \$28,452.00 USD Bi-weekly

Arcata, CA 95521 US Hours per week: 40

Series: 1316 Pay Plan: GS Grade: 6

This a time-limited appointment or temporary promotion

#### Hydrologic Technician/Data and Laboratory Manager

- Served as Data and Laboratory Manager for the Caspar Creek Experimental Watershed Study.
- Managed a large array of hydrologic, climatic, and sediment data related to the effects of forest management on hillslope processes. Processed data for multiple studies and performed preliminary sediment load analysis for use by senior unit scientists. Oversaw a sediment laboratory performing analysis of samples from 23 gaging stations. Trained and supervised student assistants performing sediment analysis.

Peace Corps 05/1997 - 07/1999 Box 30518 Nairobi

Salary: \$2,400.00 USD Per Year

Chuka, 200 KE Hours per week: 40

#### Agroforestry Extensionist

• Assessed the potential for agroforestry intervention in Kenya's Tharaka-Nithi District.

• Created awareness of the benefits and opportunities of agroforestry practices including environmental protection and conservation, fuel wood and fodder production, soil fertility and erosion control, and boundary demarcation. • Advised on the establishment and management of on-farm tree nurseries and using trees in agricultural systems. • Conducted farm visits, developed community workshops, presented in schools, led field trips, and developed extension materials. • Worked in collaboration with the Kenyan Ministry of Environment and Natural Resources, non-governmental organizations, and local community groups to advance program integration. • Carried out extension activities while exercising sensitivity to the local cultural, social, economic, and political environment.

Education: Humboldt State University

Arcata, CA US

Major: Environmental Systems

Relevant Coursework, Licensures and Certifications:

Graduate Research: Awarded a contract to create a hydrologic model, research area wetlands, and evaluate site constraints for a potential wetland restoration project.

San Diego State University

San Diego, CA US Major: Biology

Job Related Training: Diversity & Inclusion (2021): • This is Who We Are Employee Engagement Session • Moving Forward: Where do we go from here? • Inclusivity Series Launch & Afterthoughts Discussions • Foundations of Neuroscience of Inclusion • Intersectional Identities Work Environment Program (2021): • Comprehensive Wellbeing and Resilience Training Course • Mindfulness-Based Stress Reduction Training Course • Noticing Our Response to Stressors & Anxiety: Foundation for a Healthy and Productive Response Webinar Series Other Significant 30+ hour Trainings: • Advanced Leadership. Milford, PA, 2014. • Geomorphic and Ecological Essentials for River and Stream Restoration. Truckee, CA, 2012. • Geology and Ecosystems in the Field. Tobacco Root Mountains, MT, 06/07. • National Groundwater Training Course. Rapid City, SD, 05/07.

References: Ben Letton

Lahontan Regional Water Quality Control Board

Assistant Executive Officer Phone Number: (530)542-5436

Email Address: Ben.Letton@waterboards.ca.gov

Reference Type: Professional

Rocio Espinoza

Eldorado National Forest

Forest Engineer

Phone Number: (530)295-5647

Email Address: rocio.espinoza@usda.gov

Reference Type: Professional

Amy Lind

Forest Service, Pacific Southwest Region

Hydroelectric Coordinator Phone Number: (530)478-6298 Email Address: amy.lind@usda.gov Reference Type: Professional

Christine Mai

Shasta Trinity National Forest

Forest Hydrologist

Phone Number: (530)226-2428

Email Address: christine.mai@usda.gov

Reference Type: Professional

Additional Information: • Federal Coaching Program participant • Forest Service Mentoring Program participant • Numerous performance awards received

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#### Sole Proprietor and Principal Investigator, ECOLOGICAL OUTREACH SERVICES

1999-present: operated based on private sector economic conditions. Offering: ecological/biological project management, ecological site planning, advocacy, conservation planning, botanical, general ecological, biological, and wetland surveys/wetland ecology, fire ecology, stormwater/erosion control project management including on-the-ground monitoring and supervision, construction monitoring, assistance with resolving land use code enforcement violations, ecological restoration & revegetation, native plant gardening/landscaping, environmental education/training, eco-tourism, photography. Freelance creative, science, nature, and technical writing. (Writing resume is available upon request).

# <u>Statewide Consulting Experience (specific list of clients and/or projects is available upon request)</u>

- -project management and supervision, including in the field
- -preparing and conducting environmental educational and training programs
- -supervising, writing, reviewing biological sections of CEQA and NEPA documents
- -general biological inventories (including birds/raptor nest surveys)
- -rare plant surveys and floristic inventories (including non-native weed surveys)
- -designing and implementing mitigation for rare plant/floristic impacts
- -vegetation mapping
- -wetland delineations/mitigation
- -restoration and revegetation
- -stormwater/erosion control compliance (NPDES)
- -Habitat Management Plans
- -Resource Management Plans and Management Recommendations
- -conservation planning
- -desert tortoise monitor
- -assisting with red-legged frog surveys and other herpetological surveys
- -conducting Quino checkerspot butterfly protocol surveys
- -construction monitoring and supervision/writing monitoring plans
- -resolving/mitigating "red tags" for environmental violations (including cannabis)
- -utility forester/biologist for electrical distribution system
- -checking and setting small mammal and herp traps
- -conducting literature reviews/submission of CNDDB forms
- -permitting services including ESA (state and federal), 404, 401 and 1600
- -Bay-Delta Programs (CDFG)

#### Governmental/Institutional Experience

#### Environmental Scientist

#### Central Valley Water Quality Control Board

#### April 2009-May 2010

Reviewed projects for issuance of 401 Water Quality Certifications/Porter- Cologne Water Quality Act (California law) for Waste Discharge Requirements. Reviewed environmental documents (NEPA/CEQA), wetland delineations, biological reports, restoration projects, mitigation. Participated in HCP efforts through interagency planning groups. Worked with many agencies and entities. Performed enforcement



actions including Notice of Violations, ACL's, and Cleanup and Abatement Orders; conducted storm water inspections, including water sampling, for/with NPDES Stormwater Program. Close coordination and communication with the Army Corps of Engineers 404 Program and California Department of Fish and Game was a required component of this job.

## Botanist, Selawik National Wildlife Refuge U.S. Fish and Wildlife Service, Kotzebue, Alaska

June-October 1997

Position jointly funded by U.S. Air Force. Priority was to complete provisions of Conservation Agreement/Plan I initiated with U.S. Air Force in 1996 for rare plant mitigation. Wrote the scope of work and budget for this project. Mitigation included transplantation and seed collection. Multi-partnership project (5 entities).

### Endangered Species Specialist/Botanist

August 1992-December 1996 U.S. Fish and Wildlife Service, Regional Office and Ecological Services, Anchorage, AK Coordinated first (and only) Ecological Services Rare Plant Program for Alaska, Created Alaska Rare Plant Forum which is still functioning and is now international. Produced Interagency Alaska Rare Plant Guide. Implemented Sections 4, 6 and 7 of the Endangered Species Act; (listing, intergovernmental coordination, and consultation, respectively). Assisted other FWS programs (Habitat Conservation Program-ACOE 404 reviews). Initiated and wrote first Conservation Agreement/Plan in Alaska between USFWS and U.S. Air Force. Reviewed NEPA documents. Assessed impacts to fish and wildlife habitat for private, state, and federal projects. Coordinated and/or conducted rare plant/floristic surveys. Wrote and supervised contracts, projects/field reports, and summarized ecological data. Coordinated and assisted in revegetation projects. Initiated and coordinated the first inter-agency/NGO Anchorage "Celebrating Wildflowers" event which is still held annually. Created/implemented pilot Anchorage Native Plant Salvaging Program for which I received an award.

#### Endangered Species Specialist/Botanist

June 1991-July 1992

U.S. Fish and Wildlife Service, Ecological Services, Cheyenne, Wyoming

Standard duties included those described above. Created Wyoming Rare Plant Working Group and initiated/coordinated creation of the interagency Wyoming Rare Plant Field Guide.

# Natural Resource Specialist-Eastern Team

June 1990-June 1991

National Park Service, Denver Service Center, Lakewood, Colorado

Completed environmental compliance for Park Service projects and participated as team planner. Wrote NEPA documents, completed Section 7's with USFWS, participated in wetlands delineation's in compliance with Clean Water Act 404 process, Executive Order on Wetlands/Floodplains, and local coastal regulations.

#### Biologist, Enhancement Project

December 1989-May 1990

Investigated if there was any correlation between pesticide application on wildlife habitat and wildlife damage claims from ranchers. (Soil Conservation Service cost-shared up to 80% of the pesticide application costs).



# Coordinator, Land Protection Planning and June-November 1989 Stewardship, The Nature Conservancy, Frankfort, Kentucky

Coordinated landowner registry program and cared for 23 preserves. Required ability to work with all types of people and be resourceful to meet stewardship needs as economically as possible. Also led hikes for the public and donors.

# Environmental Services Technician California Dept Parks and Recreation, San Diego

January 1988-May 1989

Conducted CEQA surveys for rare plants, conducted trail-use evaluations, assisted in revegetation projects, wrote and supervised two contracts, digitized rare plant locations using GIS (arc-info). Assisted wildlife biologists in setting traps and analyzing research data.

#### Research Technician

May-September 1987

Toolik Lake Arctic Research Station, Alaska Systems Ecology Research Group; Vernal Pool Research Project, San Diego State University

Assisted in research project to monitor long-term ecological effects of the Trans-Alaskan pipeline. Data collected included root growth, phenology, leaf area index and biomass of tundra vegetation. In San Diego assisted in project to monitor success of "created" vernal pools versus natural ones. Used two listed plant species as indicators: San Diego mesa mint (*Pogogyne abramsii*) and toothed lobelia (*Downingia cuspidata*).

#### Ecologist (seasonal only)

April-October 1986

#### Ohio Dept of Natural Resources, Div of Natural Areas and Preserves, Columbus

Used aerial photos and topographic maps to locate potential natural areas in Belmont and Guernsey Counties. (Both counties were over 50% strip-mined). Potential areas were field checked and ecological data was taken to quantify significant ecological attributes and justify candidacy.

#### Graduate Student

January 1984-June 1986

#### Dept of Botany, Ohio University, Athens, Ohio

Conducted Master's research on former federal candidate Category 2 species, *Synandra hispidula* (Guyandotte Beauty- Mint Family). Research included demography, phenology, seed/germination studies, herbivory (by default). Thesis sent to USFWS Office of Endangered Species, Atlanta, Georgia.

# Undergraduate research experience

May 1983-January 1985

# Dept of Botany, Ohio University, Athens, Ohio

Research assistant for graduate advisor Dr. Philip Cantino. Prepared pollen for electron microscopy. Conducted floristic survey of property under consideration for acquisition by the university. Worked in The Bartley Herbarium assisting with routine duties of the herbarium: processing loans, accessioning, annotating, identifying, mounting, and repairing specimens.

### Interpretive/Instructional Experience

Freelance Ski Instructor (20 years, all ages, downhill and cross-country)

Donner Ski Ranch, Norden, CA

December 2016-April 2017



#### Seasonal Patrol

#### Tahoe City Public Utilities District, Tahoe City, CA

June-September 2016

Unarmed position. Fun summer job at Tahoe. Patrolled extensive system of parks for visitor, maintenance, wildlife, related issues. Also supervised private events that used park facilities. Assisted with boat ramp operations and inspections, restoration projects, trail maintenance. Required constant contact with the public and communication/cooperation with local, state, and federal personnel/agencies such as U.S. Coast Guard, CA State Parks, Homeowner's Associations, and Placer County Sheriff/Animal Control among many others.

**2014-15. Educator Participant. COOL4ED Program**. Selected to participate in State of California program to develop free online texts. I reviewed two biology texts and tested one of them in a classroom environment. http://www.cool4ed.org.

#### Adjunct Instructor

August 2012- December 2015

Biology Department, Yuba Community College, Marysville & Sutter Campuses, CA

Primary instructor for Ecology Lecture and Labs. Revised Ecology lab manual for department. Also taught biology courses.

#### Adjunct Instructor

January 2014-June 2014

Biology Department, Butte College, Oroville, CA

Taught biology lab and lecture for introductory biology course.

#### Adjunct Instructor/Field Trip Leader

January 2006-May 2011

Biology Department, Sierra College and Sierra College Community Education Program Rocklin, California

Designed and taught <u>Ecological Field Methods</u> course including lecture, labs, arranging guest scientist visits, and field trips. Also lead nature education hikes and taught native plant landscaping course.

#### Adjunct Instructor

August-2001-September 2003

Biology Department, Palomar College, Escondido, California Instructed lab and lecture fast track course in introductory biology.

#### Interpretive Specialist/Ranger

July 1998-July 1999

Dixon Lake/Daley Ranch, City of Escondido, California

First position of its kind in the City. Created and coordinated a new docent program, renovated and maintained park interpretive signs, and lead natural history hikes/talks. Performed regular duties of a park ranger in addition to these duties (garbage pick-up, campground maintenance, fishing derby, fish station clean-up, and patrols). Also prepared and obtained grant through the Natural Resources Conservation Service for removal of invasive plants species at Lake Wohlford and Dixon Lake.

#### Adjunct Instructor and Tutor

January-May /Sept-Nov 1997

Biology Department, University of Alaska, Anchorage

Instructed labs and lecture courses in introductory biology/botany.



# Instructor (Intermittent) Anchorage School District

June 1995-June 1997

Conducted workshops on botany/ecology topics for teacher in-services as part of a National Science Foundation Earth Sciences grant.

Freelance naturalist/environmental educator/instructor--present & past clients: Natural Resources Program, UC Davis Extension, Wetlands Training Institute, Home Tutoring Plus (Meadow Vista, Ca), Alta Sierra Elementary School After School Nature Program, Eco-Kids (Sierra Nevada Deep Ecology Institute, Grass Valley), Independence Trail Docent Program, Nevada County, UC Berkeley Museum (Paleobotany Program), San Diego Chapter of the Sierra Club, Bell Gardens (Valley Center, Ca); KQ Resort (Julian, Ca) ;Rancho Corrido Campground (Pauma Valley, Ca); home school and children groups; play guitar, sing,/compose ecosongs.

Summary of other interpretation/instruction/outreach experience: Presenter, Reptile Exhibit, San Diego Natural History Museum; Instructor, Denver C. Fox 6th grade Outdoor School, Santa Ysabel, Ca; Instructor for self-designed course on the local flora, Ohio University, Athens, Ohio; Teaching Assistant, Department of Botany, Ohio University, Athens, Ohio; Seasonal Naturalist, Grand Lake St. Mary's State Park, Ohio Dept. of Parks and Recreation; Counselor, Camp Farnsworth, Thetford, Vermont; Youth Conservation Corps, Defiance, Ohio.

#### **EDUCATION**

M.S. in Botany (Plant Systematics and Ecology); B.S. in multidisciplinary Field Biology, Ohio University, Athens, Ohio, 1986 and 1983.

Additional coursework at University of Cincinnati, University of California, La Jolla, University of Wyoming, University of Alaska, Anchorage, and Sierra Community College (Rocklin, CA).

#### COMPUTER EXPERIENCE

All standard Microsoft Windows programs, GIS-Arc-Info (digitized data only), Microsoft Excel, various database programs per project needs, introductory course in ArcView GIS, HTML Web Design course, Wordpress, Movie-making on Your Computer, GPS, Internet/email software.

#### TRAINING / CLASSES (always on-going)

Grant Writing; Environmental Law; Conducting Section 7 Consultations (Endangered Species Act); Effective Presentations; Negotiation Skills; Bear and Firearms Safety (Alaska job requirement); Conflict Resolution & Consensus Building; Conservation Biology (Interagency Workshop, 1995); Inventorying and Monitoring Rare Plants (BLM Workshop 1995); CNPS Vegetation Sampling Workshop (refresher); San Diego's Sensitive Butterflies Workshop (2001); Geology of San Diego County (SDNHM Class, 2002); Wetland Delineation (Wetlands Training Institute) (refresher) 2004; Soils Class, Sierra College (Fall 2005); ARC VIEW GIS Sierra College (Fall 2005); Climate Change: Is This a New Age for Land Use Planning and CEQA? UC-Davis Extension (May 2007); Willows of California, Chico Herbarium, Cal State Chico (June 2008); Oak Woodland Ecology and Management, Cal State Chico



(October 2009,); Natural History of Mono Lake and Pt Reyes, Sierra College (Fall 2009); Ornithology: Biology of Waterfowl and Shorebirds, Sierra College (Fall 2009).

#### **Current Certifications**

State of California Certified Small Business. Nevada and Yuba County approved biologist. For larger projects, Federal and State of California Permits, have worked under prime's permits.

### SUMMARY OF VOLUNTEER EXPERIENCE

Laubach Literacy Training, Literacy Program, Nevada County Library; Redbud Chapter, CNPS and other community groups in Grass Valley; Julian Planning Group, San Diego County; San Diego Bird Atlas Project, San Diego Natural History Museum; Volcan Mountain Preserve Foundation; California Native Plant Society; Iron Mountain Conservancy, Ramona; Adoptacyon Campaign hikes, Sierra Club-SD; Vice President and Program Chair, Alaska Native Plant Society; Education Chair, Anchorage Chapter of Audubon Society; Chair of Programming, San Diego Chapter of the California Native Plant Society; Orchid House, San Diego Zoo; Careline Volunteer (24-hour crisis line) Athens, Ohio.

# A W A R D S / P U B L I C A T I O N S / W R I T I N G / O T H E R I N F O (A separate writing resume is available for a more comprehensive list of writing products).

Hundreds of technical reports for governmental agencies and private parties.

January 2016. Guest Speaker, Nevada County Master Gardeners Annual Banquet. Topic: Preserving Our History Through Preservation of Our Native Plants.

Submission of over 1000 plant specimens to herbaria in Ohio, Alaska, Utah, and California (on-going).

2005. Nevada's Buried Treasure: The Lund Petrified Forest. Abstract for Botanical Society of America, University of California Museum of Palentology. Erwin, D. et al. (Moran co-author)

2002 & 2003: Rare Plant and Vegetation Surveys, Santa Ysabel Preserve 2002 and 2003 (<a href="http://www.co.san-diego.ca.us/parks/docs/syosp/Appendix\_A.pdf">http://www.co.san-diego.ca.us/parks/docs/syosp/Appendix\_A.pdf</a>)
County of San Diego and The Nature Conservancy

2004: Post-Cedar Fire Ecosystem and Rare Plant Impact Survey, Santa Ysabel Ranch Open Space Preserve, East Ranch (<a href="http://www.sdcounty.ca.gov/parks/docs/syosp/Appendix B.pdf">http://www.sdcounty.ca.gov/parks/docs/syosp/Appendix B.pdf</a>) (Included assessing fire impacts on oak woodlands)

1997: Awarded the Outstanding Stewardship Award by the Anchorage Waterways Council for the pilot Native Plant Salvaging Program and featured in Anchorage Daily News newspaper for program.



1997: Speaker for the Public Lecture Series, Anchorage Waterways Council/Audubon Society

1997. "Implementation of the Multi-partnership Conservation Agreement for *Oxytropis arctica barnebyana* (Barneby's milkvetch) Kotzebue LRRS 1996/1997." Final Report for the U.S. Air Force Work Order Number 86059. Elmendorf Air Force Base, Anchorage, Alaska. 49 pp. plus appendices.

1996. "Aleutian shield fern" and "How you can help protect endangered species" In: "Alaska's Threatened and Endangered Species", edited by M.Sydeman, Alaska Department of Fish and Game. pp. 23 and 29.

1996. Coastal America Progress Report and Update, "Strengthening Regional Efforts--the Barneby's Milkvetch Conservation Agreement" pp.13. Coastal America, Washington, D.C.

1995, 1996 and 1997, received awards from U.S. Fish and Wildlife Service for performance, including two Special Achievement awards, a time-off award for coordinating "Celebrating Wildflowers", and an "On-the-Spot" award for the report completed for the U.S. Air Force.

1994. Moran, V.S. 1994. "A different perspective on sustainability". Ecological App.4(3) pp. 405-6. Technical Advisor for 1994 and 1998 DOI Multi-agency (USFWS, BLM, USFS and Heritage Programs) Wyoming & Alaska Rare Plant Field Guides.

Assisted with editing 2001 List of Flora of San Diego County through the San Diego Natural History Museum.

1990-91: Freelance writer, Academic Press Dictionary of Science, Harcourt Brace Jovanovich, Inc., San Diego, California. Researched topics: mycology, taxonomy, systematics, ecology, botany for dictionary.

1987. Zedler et. al. New county record for *Scribneria bolanderi* and *Agrostis avencea*. Madrono 34:4 pp.381.

1986/85: Abstract. Presented results of graduate research, Ecological Society of America, Syracuse, N.Y.

1983. Wrote and was awarded a grant from the Ohio Dept of Natural Resources, Division of Natural Areas and Preserves for graduate research project.

1990's-present: freelance writer: author of three novels. Variety of freelance articles published print/online; The Grass Farmer (for cattle ranchers, not pot growers), Chico News and Review, Sacramento News and Review, The Union newspaper (Grass Valley), YubaNet, Anchorage Daily News, Casper Star, newsletter of the Alaska Native Plant Society (Borealis), Alaska Audubon Society (Okiotak), Alaska Wildlife Alliance, California Native Plant Society Newsletter, Vision Magazine, The Blend, and many others. Have also presented information about ecology for various public radio stations (KVMR-Nevada City). Professional photos published in articles and on various public information sites (CalPhotos).



# ORGANIZATIONS/MEMBERSHIPS/CERTIFICATIONS

Various professional ecological and science organizations.

# INTERESTS

My two dogs adopted from shelters. Just about anything outdoors. Science, writing, exploring, hiking, botanizing, birding, kayaking, running, bicycling, camping, backpacking, and downhill/xc skiing.

file: general comprehensive resume

I have extensive Engineering experience in the fields of Electrical, Mechanical, Electronic, and contracting as reflected in my work experience below. Department head selected me to attend and complete 1LS for supervisors training.

# **Work Experience**

• US NAVY-Puget Sound Naval Shipyard, PSNS (11/07/2021 – Present) Supervisor Electronics Engineer, GS-0855-13, Bremerton, Washington

I am the Branch Manager for Electronics & Combat Systems Engineering at PSNS & IMF PY. I direct the efforts of a technical staff in the accomplishment of engineering and planning work in systems identified. I have accomplished; long range planning, identifying projected workload, staffing needs, types and levels of skill and training required. I recruited and hired five qualified Engineers and participated in loan requirements. I have reviewed and assumed responsibility for final technical adequacy timely completion of work performed and evaluated work performance. I have performed all necessary managerial and administrative duties associated with the operation of the Branch. This includes DPMAP write ups for all 23 employees, certifying time in Sup desk, approving and denying leave requests, holding employees accountable to follow the division's standards to work within allowable hours, conducted weekly staff meetings to share weekly updates from the Division head. I also assisted two employees with Reasonable Accommodations, and another employee to obtain FMLA.

• Naval Hospital Bremerton (NMRT), 04/12/2021 – 11/07/2021) Facilities Operation and Engineering Manager, Bremerton, WA, Pay Grade GS-12

I provide oversight, guidance, and supervision of assigned subordinates within the Operations and Maintenance Division. I am responsible for the day-to-day operations of the facility and plants, and long-range large and small projects planning and executions for Bremerton hospital, Bangor, and Everett clinics. In my position in the Facilities Engineering, I have developed a diverse skills focused on the design, construction, and life cycle maintenance and repairs of military medical installations, facilities, and civil works projects. I have been involved in all facets of life cycle management from planning through disposal, including design, construction, environmental protection, base operations and support, housing, real estate, and real property maintenance. I have evaluated facility conditions, configurations, inspections, and audit findings to develop the multi-year SRM facility Maintenance Action Plan and the annual Maintenance Execution Plan to meet mission objectives.

• US NAVY-Puget Sound Naval Shipyard, PSNS (04/02/2017 – 04/11/2021) Electrical/Mechanical Engineer, Bremerton, Washington, Pay Grade: GS – 0830/850 - 12

I have demonstrated excellent customer service in addition to superior communication skills, ability to solve problems with unique approaches, and ability to stand up new programs such as Covid-19. I am highly capable of executing any task by applying existing processes and allocating appropriate resources.

I provided full engineering support for PMS 555 program. I participated in data gathering and studies of all utilities such as fresh water, Sault water, compressed air, natural gas, sanitation sewer, oxygen system, and natural gas to support NAVFAC and the program office. I partnered up with NAVFAC Engineering teams and Notkins Engineering staff by working closely with them to assure the success of the program. I was selected by Senior Management to lead a team of 16 during the initial COVID-19 pandemic response from 01 April to 17 July 2020. Worked closely with various departments to develop Strategy and Guidelines over a weekend and submitted for higher level approval. The very next day, I executed the training program for the crew and both approved documents. I made logistical arrangements for setting up supply chain, transportation, and mobilizing the response team. I managed and led the clean-up of 130 spaces in PSNS & IMF, and Bangor. My success led to senior management recognizing me with a large cash award. When the strategy changed to transfer this work to the department head level, I immediately captured the changes and updated the guidelines and processes. Additional strategy changes from NAVSEA required testing RD UVC. I participated in training and testing this new equipment. I developed the SOP to operate the equipment and validated this SOP though Testing RD UVC.

The department head appointed me for the transportation of fuel and equipment via Rail system. I have been involved with the planning, UFC inspections, audits, and various testing and certifications of the Railroad and Crane rails inside the CIA. The department head designated me to work with the construction manager from NAVFAC on several multimillion-dollar Rail/bridge repair projects.

Provided technical advice on Electrical/Electronic and Mechanical systems to dry dock maintenance crew, operators, Pump well and caisson for proper maintenance and repairs. Act as 980 liaisons on issues with PSNS & IMF Dry dock staff, and NAVFAC design/construction contracting. Led a Task Force Team consisted of Engineers, shop supervisors, senior managers, and staff from NAVFAC and PSNS & IMF to evaluate the spills and determine the root cause of sewer spill. I utilized Ishikawa fish bone diagram to identifying the underlying source of a process or product failure so that the right solution could be identified. Gained comprehensive knowledge of the configuration and proper operation and maintenance of dry docks and their associated systems, including large industrial dewatering pumps, valves, piping, sluice gates, and capstans. Learned Federal, State, and local water quality standards applicable to dry dock operations and process water systems and applicable monitoring program.

Provide full Electrical/Mechanical Engineering support for Industrial Treatment Systems (ITS). Provide engineering support to the production and facilities by applying knowledge and experience gained from DAWIA level III certification and Facilities Engineering certification and practices. Provide Engineering support for Operation, Maintenance, and Repairs on ITS. This will include Chemical Treatment Plants (CTP), Oily Waste Water Treatment Systems (OWTS), Dry Dock Process Water Collection Systems (PWCS). I was overseeing several MILCON projects for PWCS systems.

Identified deficiencies and provided Engineering design changes to resolve all problems in support of dry dock operations and maintenance. Gained a full understanding of the IT network and SCADA systems and identified deficiencies. Developed a plan addressing number of challenges with designs, determined the correct protocols and implemented corrections. I have applied my diversified experience in electrical, mechanical and electronics engineering for facility planning, programming, and design; maintenance, repair and construction projects.

Gained understanding of Shipyard production processes and ship repair evolutions, as they relate to facility requirements, maintenance, and operations. Ability to plan, present, and organize large scale assignments, conduct meetings, and discuss technical matters as an authority with different groups having different and opposing interests. Perform my duties and welcome additional assignments. Promote teamwork and establish and maintain great relationships and communication with the internal/external to the organization. Perform safe work practices, and fully support Operational Risk Management (ORM). I was selected by the Department head to attend and complete 1LS for supervisors training.

 US Army Corps of Engineers, (09/16/2007-03/31/2017) Electrical Engineer, Communications & IT Infrastructure Program Lead. Seattle, Washington, Pay Grade: GS-0850-12

I have been involved with the following tasks to support the Army missions as stated below in sections I, II, and III, IV.

I. Since 2014 to 2017, I was specifically requested to serve as the program lead for Communications & IT Infrastructure for Seattle District operating projects, creating a bridge to connect the operations and project missions with the IT team. I understood the scope, relationships, and critical dynamics of internal processes and procedures to serve as a type of aide de camp for IT team. Through my expertise, communication, and resolve: over the last years we have been able to accomplish many vital improvements and facilitate a renewed, invigorated, and trusting partnership. I utilized my relationship with Operation Project Managers (OPMs) to establish 5-year capitalization planning initiative to provide a roadmap for out year spending as it pertains to equipment lifecycle replacement, IT project management, and service and support. I provided redundant communications in the form of Combat Service Support Very Small Aperture Terminal (CSS VSAT) and through my persistence. Worked with the IT radio teams and project leadership to earmark and acquire six additional terminals for other projects at no Acquisition cost (as part of the continuity of operations initiatives). Installed DS3 (45MB data circuit) at two facilities, with plans to implement this to two other sites. However, my negotiations, I have been instrumental in acquiring strategic fiber resources to upgrade T1 lines to fibers and increase their communication Bandwidth to 50 Mbps at a fraction of the construction and installation cost.

II. Asset Manager from 2012-2014. I learned, administered and maintained a database named AMRIP. This database was capable of tracking all investments identified by our operating projects, identified the budgeted amount to be used for budgeting purposes for up to the next 10 years to maintain, repair, and replace all the sluice gates that Army owns in the northwestern region. Provided support and participated in development of Best Maintenance/ Management Business Practices that a database named FEM tracks. Developed a PgMP to include the management of the Mission Critical Asset Program (MCAP) for the District. I was responsible for providing consulting and technical support for real property valuation and appraisals by providing validation to the real property asset information to real estate department. Scheduled, participated, and fully developed Operation Condition Assessment

program to feed into the asset management program for tracking the condition of assets at each operating project. I have participated, coordinated, scheduled Comprehensive Facility Power Review for hydropower facilities for the past 10 years to evaluate and validate maintenance practices at all hydropower facilities.

III. Manager, Logistics in 2012. I managed all logistics associated with moving to a new facility by our senior leaders for Operations Division. I developed an extensive schedule, identified all work to be accomplished, identified resources, funding needs, and merged this planned schedule with the contractor's schedule during last phase of construction. I utilized my knowledge in DAWIA in SPRDE field to prepare contract acquisition documents, arrange full execution of contract with the contracting department, and procure all equipment in a timely manner. Coordinated all planning, equipment tracking, cubicle configurations, and also designed, moved, and built our entire Microwave radio communication equipment in the new facility under budget, and ahead of the schedule. I resolved major electrical grounding issues associated with the construction of a new facility. Received several team awards from, the Commander, Federal Executive Board, and BPA. I utilized my knowledge in DAWIA in SPRDE field to prepare contract acquisition documents, arrange full execution of contract with the contracting department, and procure all equipment in a timely manner.

IV. Manager from 2007-2012, Reliability Compliance Program. I ensured that the operation of hydropower dams met acceptable levels of safety and reliability, including cyber security over Supervisory Control and Data Acquisition (SCADA) systems as established by law and regulation through the Federal Energy Regulatory Commission. I served as technical advisor to real-time dispatchers for relaying, metering and SCADA-related issues, power system, and contingency analysis and to supported dispatchers and outage office operational needs on impacts of relaying outages. I accomplished this through technical expertise as well as administrative program management skills. I developed policies, program management plans, and reporting documentation reflecting interpretation of standards as applied to Army Corps facilities. I provided coordination efforts regarding Remedial Action Schemes testing and support between transmission owners and Army Corps generation facilities. I chartered and chaired a team to develop a list of critical cyber assets and come up with a design to protect these assets. I developed mitigation plans and developed Project plan to track all required work and the resources, developed a budget and negotiated for additional funds required to accomplish this task. I lead the coordination of required system tests, acquired data for system modeling, and other compliance related and/or requested disturbance data surveys. I represented Army Corps as generator owner and operator in conferences and meetings with other agencies, state and local authorities, industry and regional and national electric power organizations in efforts to develop policies, practices and projects. Provided technical advice to the chief, operations Division and the District Commander on reliability compliance matters. Interpret and implement federal policies and regulations in managing the District reliability compliance.

 US NAVY-Puget Sound Naval Shipyard, PSNS (09/04/2005 - 9/15/2007) Electrical Engineer, Bremerton, Washington, Pay Grade: GS - 0850 - 12

Provided Facility Engineering to conceive, design, prepare technical products, and to resolve technical problems associated with industrial plant equipment utilized to perform ship maintenance. Identified needs for new equipment and improvements to existing facilities and equipment. Evaluated requests regarding proposed solutions. My technical support involved both acquisition and procurement of new industrial plant equipment as well as maintenance, repair, testing and modification of existing industrial plant equipment. I dealt with various cranes such as Portal, tower, Pillar, Floating/Derricks, overhead and Gantry type cranes at our hydropower facilities. Developed maintenance procedures and training material for these cranes. Performed trouble shooting of control systems and sensors to develop SOP for periodic inspections. I recommended, developed and applied new procedures and techniques to resolve valuation problems. Conducted presentations involving sensitive and high-profile issues related to real estate acquisition or disposal. Designed and prepared technical products, field-engineering support and communicated between departments to resolve problems associated with the shipyard industrial support facilities and plant equipment from inspection through final acceptance and testing. I provided several presentations to establish the need for new or improved facilities and equipment by validating cost savings and determining funding source, integrated priorities of numerous customers and providing project status updates. Evaluated requests and defined requirements for equipment acquisitions, disposal plans, and maintenance programs, reviewed costs and savings, funding source, equipment. Developed facilities master plans (FMP), military construction program (MILCON), and managed capital investment plans (CIP), OPN equipment, and maintenance and repair of built-in equipment in industrial facilities. I administered and directed process improvements

# ■ US NAVY- NSWC PHD (07/01/2000 - 09/04/2005) - Electronics Engineer Port Hueneme, California, Pay Grade: GS - 0855 - 12

I had several responsibilities to support the Navy missions as stated below in sections I, II, and III; I. Manager, Combat System Projects. Provided on-site project management support for execution of repair/modernization services for installation, operation and maintenance of combat systems during ship availabilities. Was senior single point of contact for support and training during installation and checkout (I&C), test integration, CSSQT, SQT, SAT and other test/evaluation efforts at shipyards, on board ships during ship's availability. Integrated installation teams with contractor production schedules and ensure each ship receives required deliverables. Coordinated, scheduled and assured administration of all repair work, and was responsible for problem identification and determine best resolutions. Worked closely with contractors, shipyard employees, SUPSHIP, Port Engineers, and managed all AIT's during the availabilities. This was accomplished through leadership and integration of work by teams from Naval station, Space and Naval Warfare (SPAWAR), Ship's Force, COMNAVSURFLANT, COMNAVAIRLANT, FTSCLANT, SIMA, contractors, and sub contractors. Developed and provided advanced planning functions on restricted overhaul (ROH), extended selected restricted availability (ESRA), phased maintenance availability (PMA), and extended docking selected restricted availability (EDSRA). Prepared reviews and modify/ update technical documentation relative to all phases of lifetime support. I provided Engineering expertise and evaluation to solve fleet's problems that affect the cost, quality, schedule, and performance of availabilities. Briefed management and focused attention on problems and seek corrective actions. Ensured the maximum use of NAVSEA approved standard work items (SWI), class standard work items (CSWI) and recurring work items

(RWI) identified and invoked in each work package. Reviewed all growth work and funding needs as discovered while performing other approved work because of open and inspect jobs. Chaired daily and weekly progress meetings: to include all teams and activities assigned to the project team. Discussed project status and provided input for the commanding officer's (CO) weekly SITREP. Provided weekly status reports to the supervisors via the web-based reporting. I assisted the ship to draft naval messages, as appropriate, to CINC LANTFLT, SUPSHIP, Navy department system commands, and naval activities. Ensured all AITs intended work has authorization and in compliance with NAVSEA TECHSPEC 9090-310C during planned availabilities.

II. DAWIA Level III in Systems Planning, Research, and Development Engineering (SPRDE) was utilized in the following areas: Participated in many Value Stream Analyses (VSA) and assisted the Green and the Black belts with their projects. Was involved in Lean Six Sigma Black belt training and was responsible for technical adequacy and timely completion of planning yard work performed. These responsibilities included both administrative and technical contract acquisition pre/post award functions. Conducted acquisition planning based on industry analysis, and technical requirements and specifications. Determined the type of contracts. Developed and prepared terms and conditions to be included in contract proposals. Evaluated contract proposals and coordinated work among the various Navy, private shipyards, and contractor teams. Supervised and monitored progress and provided reports to senior management. Performed conflict resolution and troubleshooting. Negotiated scope of work and change orders. Reviewed systems design, operational performance, and intra and inter weapon systems interfaces and ship support interfaces, technical data, and similar criteria involved in the integration of major subsystems.

III. Facility Manager I managed a modern and sophisticated facility in the Navy. My work involved planning and directing comprehensive programs for the operation, maintenance, repair, and improvement of Government installations. I was responsible for directing fire prevention, security, and other programs to promote occupant comfort and safety. Implemented and installed the new security devices and monitored access control to all employees. Developed comprehensive Standard Operating Procedures for building access and trained all employees. Determined operating and maintenance requirements, forecasted material and manpower needs, organized, and directed program resources, and evaluated program effectiveness through inspections, budget controls, and management improvement studies. I maintained ongoing maintenance control program for the facility. Developed and instituted life cycle maintenance schedules for equipment. I continually evaluated and updated cost and repair data schedules and budgets. Assigned and reviewed work performed by contractors. Developed and implemented maintenance training for trades and administrative support personnel. I managed planning, scheduling, directing, budgeting, advising, supervision and review of activities in the areas of acquisition management and disposal of real estate.

 Boeing Commercial Airplane Group (11/01/1990 - 07/01/2000) - Aerospace and Electrical Engineering Manager, Everett, Washington, (0850 series)

Evaluated, taught, and implemented Boeing's newest Lean and six sigma manufacturing process. I was involved with hundreds of projects in planning, scheduling, and executing Lean manufacturing initiatives. Performed research and evaluation of processes to maximize return on investment capital via Value Stream Analysis, formation of Lean process improvement teams (team Charters), lead and participated in Rapid Improvement Events (RIEs), and post RIE audits, and documented/reported all cost savings achieved. Developed modifications needed for optimum performance.

I developed and implemented the new business process called Define Control, Aircraft, and Configuration (DCAC), with emphasis on overhead and Gantry type cranes. Developed business processes and formed teams to test the processes and document changes. I utilized this powerful tool to promote phase implementation of DCAC business processes. Trained other instructors and senior leaders to apply these business processes throughout the Boeing Company. Selected to participate in the pilot program and learn major business processes by rotating through organizations and learning business processes.

I performed contract administrative functions such as conducting and participating in pre-award surveys, team meetings, lesson learned conferences, and past performance evaluation teams. Extensive training and knowledge in Contract Officer Representative (COR) type work specifically in Indefinite Delivery Type Contracts (IDTC) and have managed/monitored multiple contract vehicles (i.e., Fixed Priced, Cost Type, Indefinite Delivery, and Time and Material). I was a troubleshooter and liaison between line workers and design engineers. Became an expert in Boeing business processes, production control, and electrical design and manufacturing processes, and made numerous 1 improvements to both design and assembly processes. I developed a high degree of expertise in internal and regulatory requirements for producing commercial aircraft.

 Jack Ogle & Company, Electrical-Mechanical Automation Engineering Manager (July 1986-1031/1990) Seattle, Washington

Worked as Automation and Robotics Engineering Manager. I developed projects and project designs for automated systems and robotics. This included working with PLCs, variable frequency drives, AC/DC motors and controllers. Presented proposals for these projects orally and in writing to company management. Designed and installed control systems for several manufacturing assembly lines, wind tunnels at the Boeing Company, Monorail control systems, Electro-hydraulics chopstick machine, etc. I worked with various cranes such as Portal, Tower, Pillar, overhead and Gantry type cranes. I designed controls and monitoring systems for the crane operators. Performed feasibility studies, drafted project cost estimates and budgets. Coordinated and managed project implementation, progress completion and testing. Coordinated among different vendors, suppliers and contractors. Provided technical support to operator personnel and management. Developed and conducted technical seminars on automation.

# **Education & Certifications**

I received the following certificates from USACE:

- ➤ Completed NAVY's 1LS for first line supervisors September 2017.
- Network security certified
- ➤ DAWIA Levels I, II, and III Certified
- ➤ Facilities Engineer (FE) Certificate
- COR certified by US Army Corps of Engineers
- Contract Law
- Common Supplier Engagement, and Estimate at Completion
- Sealed Bidding and Cost Estimating
- ➤ Contract Terminations, and CLC 004 Market Research
- ➤ CLC 222 Contracting Officer Representative
- CLC 013 Services Acquisition
- CLC 106 COR with A Mission Focus
- ➤ CLC 206 COR in A Contingency Environment
- CLC 007 Contract Source Selection
- ➤ CLE 008 Six Sigma: Concepts and Processes
- ➤ CLE 004 Introduction to Lean Enterprise Concepts
- ➤ CLE 007 Lean Six Sigma for Manufacturing
- ➤ CLC 006 Contract Terminations
- ➤ CLM 003 Overview of Acquisition Ethics
- Defense Travel Management Office (Travel Card)
- ➤ Arc Flash Protection and Electrical Safety Certificate, Haz-Com Identifying the Dangers 133
- Management of Hydropower O & M
- Hydro Generator Course
- ➤ Hydro-Electric Power Plant Operations and Maintenance
- ➤ General Contracting License
- Risk Management and Work Breakdown Structure WBS
- $\triangleright$  Fundamentals of T and E 2016, and ISO 9000 trained and certified
- Pneumatics Training Certificate
- Application and Installation of Intrinsic Safety Training Certificate
- ➤ Business Professional- 21st century 3578
- ➤ Leading a Team 10184, and Delegating for Results 10925
- Negotiation Skills and Techniques
- Boeing Teaching Certification
- ➤ PMP Trained, and Boeing Project Management Certification
- Lean & Six Sigma trained
- ➤ Leadership and Management Certification-200 hours
- > 7 Habits of Highly Effective People

### University:

- ➤ Defense Acquisition University, Port Hueneme, CA
- ➤ Bachelor of Science in Electrical and Mechanical Engineering, Seattle University, Seattle WA
- Associate of Science in Electronics, Semiconductors, and Media Technology, ORT
- Associate of Science in Automotive Technology, ORT.

# **EXPERIENCE**

INFOSYS Dec 2021 - Present

Business Analyst (40 hrs/wk)

- Perform gap analysis and risk management techniques for external clients.
- Gather requirements from key stakeholders and communicate to Infosys Agile development team.

AMAZON June 2021 - Nov 2021

Area Manager (70+ hrs/wk)

- Supported, mentored, and motivated a team of 50-100 hourly associates.
- Managed safety, quality, and customer delivery promises.
- Tracked incoming shipments, productivity, and workflow metrics.
- Collaborated with all support teams including Safety, Engineering, Loss Prevention, Quality Assurance, and Human Resources to develop plans that met business objectives.

PERMOBIL Aug 2010 - Dec 2016

Associate Sales Representative (70+ hrs/wk; Jan 2016 - Dec 2016)

- Negotiated dealer contracts while maintaining vital client relationships.
- Partnered with marketing team to promote optimal exposure of product offerings and new features at tradeshows and PVA Summits.
- Closely monitored sales metrics to continuously exceed territory expectations.
- Collaborated with end users, caregivers, and therapists across the U.S. to recommend complex rehabilitation products that met end users' unique needs.
- Conducted in-service presentations and training on complex rehabilitation products (including power and manual wheelchairs and related assistive technologies) to end users, therapists, doctors, dealers, and VA Medical Centers.

Customer Support & Inside Sales Representative (50+ hrs/wk; Jan 2012 - Dec 2015)

- Contacted territory sales team, accounting department, and vendors to clear order discrepancies and provide expert knowledge on order forms and product offerings.
- Processed quotes, orders, and payments received via email and telephone in a fast-paced call center environment.
- Reported daily analysis of North American sales data to the global management team and innovated department work instructions to minimize processing times.

Final Configuration Technician (60+ hrs/wk; Feb 2011 - Jan 2012)

- Built and programmed custom power wheelchairs in a lean manufacturing setting and continuously exceeded quality standards and production targets.
- Innovated manufacturing processes to decrease production times and taught these processes to the technical support team and production team.

Receiving Dock Associate (40+ hrs/wk; Aug 2010 - Feb 2011)

- Received shipments and ensured compliance with purchase orders.
- Kitted power wheelchair components to increase manufacturing efficiency.

## **EDUCATION & SKILLS**

### University of Washington, Seattle, WA

**June 2021** 

Physics, B.S. | GPA: 3.4

- Research Presentation Reduction of CO2 Emissions through Advanced Carbon Nanotube Technology in EV Batteries
- Research Assistant Optical Physics Virtual Reality Software Development
- Programming Experience Python, Java, C, C#, MATLAB, Mathematica, Maple

Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 002503591

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service):

Location(s) Applied to: Boise, ID(US)

Series Applied To: 0801

#### Resume

Country of Citizenship: United States

Availability: Job Type: Permanent

Term Detail

Multiple Appointment Types Work Schedule: Full-time Part-time

Shift work Job sharing

Multiple Schedules

Work Experience: City of Caldwell, Idaho

10/2019 - Present 411 Blaine Street PO Box 1179

Hours per week: 45 Caldwell, ID 83605 US

#### Assistant City Engineer

Management of City of Caldwell stormwater compliance program, including MS4 and MSGP permits. City floodplain administrator. Project manager of engineering contracts for for municipal stormwater, irrigation, water resources and environmental projects. Manage and participate in staffing activities for City environmental programs. Technical advisor to potable water, irrigation supply, and wastewater treatment programs. Monitors changes to water law and NPDES programs in order to plan allocation of City resources. Participates in public comment opportunities during Idaho Department of Environmental Quality rulemaking, changes in State Water Quality Standards, Total Maximum Daily Loads, etc. Reviews development applications for environmental compliance with Idaho Water Rights, US Army Corps permits, Air Quality Permits, Underground Storage Tank remediation, soil contamination, construction general permit (EPA Stormwater), and compliance with local ordinance and FEMA floodplain regulations.

City of Caldwell, Idaho

11/2016 - 10/2019 411 Blaine Street

Salary: \$70,000.00 USD Per Year

PO Box 1179

Hours per week: 45 Caldwell, ID 83605 US

Project Engineer

Management of City of Caldwell stormwater compliance program, including MS4 and MSGP permits. City floodplain administrator. Project engineer for municipal stormwater, irrigation, water resources and environmental projects.

Idaho Department of Water Resources
07/2014 - 11/2016

322 East Front Street

Salary: \$57,000.00 USD Per Year

PO Box 83720

Hours per week: 40 Boise, ID 83720-0098 US

State Lead Water Rights Engineer (Staff Engineer)

Water Rights Permits Section; Water Allocations Bureau Prepare technical level water right documentation in accordance with established national and state codes, standards, and procedures related to water regulations. Analyze the impact and adequacy of engineering consultant proposals using ground-surface water interaction models such as AWAS and ModFlow. Utilize Eastern Snake Plain Aquifer, ESPA models to quantify effects of water right changes in Southeast Idaho. Employ water measurement equipment such as closed-conduit flow meters, accoustic Doppler, and flow trackers to determine flow rate and volume, in order to quantify large and small water rights, including hydropower. In addition, consult pump curves, hydrologic equations, and standards to perform theoretic calculations of water system supply capacity, as well as current demand and future demand projections. Draft technical memorandums (internal policy) on water right processing of specialized systems such as storage reservoirs, municipal drinking water, mitigation practices, and water quality improvement. Train staff on technical level tools and resources related to water resources quantification.

City of Meridian 12/2012 - 06/2014 33 E. Broadway Avenue

Salary: \$49,050.00 USD Per Year

Meridian, ID 83642 US Hours per week: 40

Public Works Capital Project Manager (Staff Engineer 1)

Engineering Division; Public Works Department Performed technical work in planning, design, construction, operation, and repair of the City water, wastewater, and recycled water facilities. This work required solving engineering problems as part of an engineering team. Work assignments were broad in scope, requiring good judgment and accuracy in making technical decisions. Teamed with and supervised engineering consultants hired for the design of capital projects. Provided technical support, guidance and assistance to the Water and Wastewater Superintendents in the construction, operation, and repair of facilities. Assisted in the preparation of Water and Wastewater Division capital programs and budgets. Administered construction project contracts to ensure timely completion, cost control, and conformance with plans and specifications. Verified developer submittals (plans/blueprints) for compliance with city master water/wastewater plans. Performed computer modeling of citywide wastewater collection system using complex ArcGIS modeling software such as InfoSWMM.

Shoshone-Bannock Tribes: Water Resources

10/2011 - 11/2012 PO Box 306 Pima Drive

Salary: \$44,000.00 USD Per Year

Fort Hall, ID 83203 US Hours per week: 40

Supervisor: Elese Teton (208-239-4588) Okay to contact this Supervisor: Yes

#### Environmental Scientist

Water Quality Program; Water Resources Department Prepared and reviewed technical reports on tribal surface, groundwater and wastewater issues. Managed the Tribal Subsurface Sewage Disposal Program, including site soil inspection and permitting. Worked closely with Federal agencies on subsurface sewage disposal designs for the protection of groundwater. Generated technical reports on groundwater level data in the Eastern Snake Plain Aquifer, ESPA. Led the development and implementation of rules and regulations to protect water resources within the Reservation. Collected surface water and groundwater samples using various field measurement and sampling equipment; generated technical reports on findings. Conducted field inspections of the following: potential groundwater contamination sites. Drafted the tribal Source Water Assessment and Groundwater Protection Plans for submittal to DEQ and EPA. Performed groundwater modeling using WhAEM and ModFlow to create Time-of-Travel maps for groundwater sources on Fort Hall Reservation, within the Eastern Snake Plain Aquifer, ESPA.

Kiewit: Bridge & Marine District

05/2010 - 08/2010 2215 E 1st Street

Salary: \$14.00 USD Per Hour Vancouver, WA 98661 US

Hours per week: 47

Supervisor: Mike Birkmeyer (360-694-1201) Okay to contact this Supervisor: Yes

## Construction Engineering Intern

Construction Engineering Intern (summer) Construction Engineering Internship: Logged, tracked, updated relevant persons of quality assurance/quality control issues pertaining to structural steel. Worked with structural engineers, field engineers, and field crew to resolve constructability conflicts. Interacted with 3D modeling software to track blueprints. Inspected false work prior to use. Calculated the amount and thickness of anchor-bolt washers in accordance with RCSC structural joint specifications. Ordered structural washers for entire site. Retrieved bolt samples site wide for strength tests. Gained training on operation of scissor and aerial lifts. Received stringent construction site safety training.

Boise State University 01/2008 - 05/2010

1910 University Drive

Salary: \$11.00 USD Per Hour

Boise, ID 83725 US Hours per week: 20

Supervisor: Dr. Molly Gribb/Dr. Sondra Miller (1-605-394-1697)

Okay to contact this Supervisor: Yes

# Soil/Water Quality Research Assistant

Project 1: LEED (Leadership in Energy and Environmental Design) Platinum Certified Banner Bank Building in Boise, Idaho; Reuse Water Quality Research: Collected reuse water samples at the Banner Bank Building in downtown Boise, Idaho. Tested samples for content in laboratory with HACH methods (alkalinity, nitrogen/ammonia, pH, total hardness, turbidity,

total/non-filterable/volatile solids, dissolved oxygen, BOD, total phosphorus, nitrate, chloride). Analyzed relevant data obtained from testing. Created a poster for the Boise State Undergraduate Research Conference: Long Term Water Quality in a Commercial Office Building. Project 2: Tested volatile organic compound concentrations using GCMS (gas chromatography mass spectrometry) and Ion Mobility Spectrometer(IMS) Sensor. Estimated detection limits of IMS. Created a poster for the Boise State University Undergraduate Research Conference: Calibration and Field Sample Collection Using an Ion Mobility Spectrometer for Detection and Analysis of Subsurface Volatile Organic Compounds. Project 3: Analysis of Soils from Dry Creek Watershed near Boise, Idaho: Performed sieve analysis and laser diffraction on soil samples. Organized data into soil particle size distribution curves using Microsoft Excel. Extensively analyzed of soil samples using Microsoft Access, the van Genuchten equation, and various pedotransfer functions to produce soil moisture retention curves.

Education: Boise State University

Boise, ID US - 05/2011

Major: Civil Engineering

GPA: 3.3

Relevant Coursework, Licensures and Certifications:

General Chemistry I + Lab; General Chemistry II+ Lab; Physics III: Waves, Heat + Lab; Physics 4: Electricity, Magnetism, and Optics + Lab; Calculus I; Calculus II; Multivariable & Vector Calculus; Differential Equations w/ Matrix Theory; Technical Communication; Statics; Dynamics; Electric Circuits; Material Science & Engineering; Thermodynamics I; Fluid Mechanics + Lab; Mechanics of Materials; Introduction to Civil Engineering; Engineering Surveying; Civil Engineering Case Studies; Principles of Environmental Engineering + Lab; Engineering Properties of Construction Materials Lab; Structures I; Engineering Properties of Soils + Lab; Transportation Engineering Fundamentals; Engineering Practice (Economics & Statistics); Reinforced Concrete Design; Structural Steel Design; Water Treatment Plant Systems & Design; Hydrogeology; Construction Engineering Internship

Meridian High School Meridian, ID US - 05/2007

Major: High School Diploma

GPA: 4.0

Relevant Coursework, Licensures and Certifications: Diploma, Class of 2007 Valedictorian (4.000 GPA)

Job Related Training: Certified Floodplain Manager - FEMA Emergency Management Institute - May 2017 PSMJ Public Works Project Management Certificate - Dec 2013 Idaho Department of Environmental Quality Source Water Assessment Delineation Training - 2012 Utah State University Onsite Wastewater Treatment Training I-III - May 2012

Professional Publications: Calibration and Field Sample Collection Using an Ion Mobility Spectrometer for Detection and Analysis of Subsurface Volatile Organic Compounds https://scholarworks.boisestate.edu/under\_conf/2009\_under\_conf/eng\_09/6/ Long Term Water Quality in a Commercial Office Building

https://scholarworks.boisestate.edu/under\_conf/2009\_under\_conf/eng\_09/1/ Exploration of Pedotransfer Function Predictions on Soil Moisture Retention in Dry Creek Experimental Watershed Soils https://scholarworks.boisestate.edu/eng\_10/30/

References: Johanna Bell, PE Association of Idaho Cities Environmental Policy Analyst

Phone Number: 2083448595

Email Address: jmontbell@gmail.com

Reference Type: Professional

Steve Potts

City of Caldwell (Retired)

Water Department Deputy Superintendent

Phone Number: 2087036298

Email Address: spotts1955@gmail.com

Reference Type: Professional

Nicole Nicholson City of Caldwell

Administrative Secretary Phone Number: 2085777899

Email Address: nnicholson@cityofcaldwell.org

Reference Type: Professional

Laura McNinch Sanjel Corporation Field Engineer

Phone Number: (208) 850-4749

Email Address: Lmcninch1@gmail.com

Reference Type: Professional

John Boyd

City of Meridian (Retired) Capital Project Manager Phone Number: 2083712099

Email Address: hdtc88s@hotmail.com

Reference Type: Professional

Elese Teton, PE

Shoshone Bannock Tribes

Tribal Water Engineer, Tribal President

Phone Number: 208-239-4580

Email Address: eteton@sbtribes.com

Reference Type: Professional

Molly M. Gribb, Ph.D., P.E. South Dakota School of Mines

Dept. Head; Professor of Civil & Environmental Engineering

Phone Number: (605) 394-1697

Email Address: Molly.Gribb@sdsmt.edu

Reference Type: Professional

#### **WORK EXPERIENCE:**

FACILITY ENGINEERING BRANCH MANAGER

Nuclear Facilities and Waste Engineering Division Puget Sound Naval Shipyard (PSNS), Bremerton, WA. October 2020-Present 1400 Farragut Ave, Bremerton, WA 98314 GS13-0840 40 hours per week Salary: \$117,000

- Manage radiological surveys and technical instructions in support of development, improvement, construction, and modernization of nuclear facilities and equipment to protect the public and the environment.
- Led the branch through the challenging period of personnel reduction (25%) and highest overtime rate in the organization. Successfully built resilience in the branch's critical skills and knowledge and thus minimized the impact caused by losing the most experienced engineer.
- Recognized as an "experienced leader" during the first 6 months of being a manager.
- As an active member of the shipyard's Radiological Emergency Response Organization, overcame the challenge of loss of network connectivity during a September 2021 drill.

#### RADIOACTIVE MATERIAL TRANSPORTATION ENGINEER,

Nuclear Facilities and Waste Engineering Division PSNS, WA. August 2011-September 2020 GS12-0840 40 hours per week Salary: \$98,000

- Monitored, analyzed, developed, and improved processes to ship and receive radioactive
  materials (radioactive liquid and solid waste, tankers, etc) to support maintenance of nuclear
  powered aircraft carriers and submarines. Interpreted and forecasted impacts from new
  regulations from local, State, and federal agencies.
- Administered contracts (\$2M-5M) and also acted as technical lead for the crucial annual shipment from Japan by vessel. Interacted with management of production and radiological control as well as Military Sealift Command and contractors. Briefed senior managers, including Senior Executive Service on project schedule, risk mitigation, and performance.
- As temporary Branch Manager, led the branch through a challenging 25% understaffed period in 2017. Borrowed and developed personnel from other branches to fill in the personnel gap. Managed training schedule and budget.
- Led a team of multiple disciplines in developing and executing a breakthrough method to ship gamma radiography devices to and from Japan, resulting in annual cost savings of \$500,000.
- Improved processes for technical work documents to include nuclear safety and health concerns.
- Improved health behavior. Implemented the 2013 "Fit for Life Challenge" and Lunchtime Series to encourage and reward employees for an active lifestyle.
- Chaired the department Safety Committee.

### QUALITY ASSURANCE ENGINEER,

Quality Division, PSNS, Bremerton, WA. July 2009-July 2011

GS12-0840 40 hours per week

- Performed surveillances, audits, evaluations, and inspections of radiological operations (including material and facility release), material conditions, training, and radiological surveys and drills/exercises to verify compliance to NAVSEA and federal limits and to maintain public trust.
- Independently performed audits of ship maintenance, including nuclear facilities and support equipment in Bangor, San Diego, and Yokosuka detachments. Interacted with radiological program managers, project managers, and other oversight organizations..
- Championed reader-friendly surveillance and audit reports using graphics. Streamlined the branch's electronic file structure.

#### ENVIRONMENTAL ENGINEER

Facilities and Reactor Engineering Divisions PSNS, Bremerton, WA. March 1999-July 2009 GS12-0840 40 hours per week

- Pioneered processes and wrote technical instructions for managing mixed materials and radioactive waste in Yokosuka.
- Provided technical directions to characterize, designate, store, and ship hazardous and radioactive materials and mixed/PCB radioactive waste per federal regulations (RCRA, TSCA) and per local regulations in the states of WA and CA to protect public health and environment.
- Project engineer in charge of operation, maintenance, and upgrading of pure water processing systems consisting of mechanical filters, ion exchange resin demineralizers, and evaporators in Bremerton, Bangor, and San Diego.
- Led a team of production, compliance, and engineering personnel to LEAN Management of mixed waste. The team received a shippard award for achieving an estimated savings of 1,228 mandays over three years.

# ENVIRONMENTAL ENGINEER, INTEL CORPORATION Chandler, AZ. and Hillsboro, OR. June 1997-March 1999

- Designed and maintained calculation models for hazardous air pollutants to comply with the Clean Air Act.
- Developed wastewater discharge goals for the new copper semiconductor process to meet local and federal limits.
- Conducted the first comprehensive water reclamation study at Hillsboro, Oregon. Saved Intel over \$1 million by recommending major revisions to the wastewater system. The project became a model for other sites to follow.

#### **EDUCATION:**

Master of Public Administration (MPA), Indiana University, 2012. GPA: 3.7

Facilities Engineering Diploma, North Carolina State University 2010

BS in Chemical Engineering; with Environmental Engineering Specialty, University of Washington, 1997. GPA: 3.6

#### TRAINING/CERTIFICATION:

Department of Transportation hazardous material shipper Emergency Responder, Radiological Technical Branch at PSNS Speechcrafters and Toastmasters Lean and Six Sigma Green Belt Security Clearance: SECRET

### **EXTRA ACTIVITIES:**

Board Member of Home Owner Association, 2020-Present

President and Communication Officer of Parent Teacher Association at Van-Lang Cultural School 2015-2020

Volunteer tennis coach for Genesee Youth Summer Program 2016-2020

Property development and management

Science, Technology, Engineering, and Mathematics (STEM) tutor in Bremerton 2010-2020.

Office building emergency coordinator

Manager of local club and US Tennis Association teams with national appearances, 2010-Present

## Professional Summary:-

I am interested in the Life Scientist and Physical Scientist Position. I have over seven years' professional experience as an environmental laboratory scientist in various roles such as a lab technician, environmental health and safety, and quality assurance. Through my experience I have gained a soild understanding of pertinent federal, state, and local laws and regulations, particularly the Clean Water Act (CWA) and/or the Safe Drinking Water Act (SDWA) and their respective implementing regulations, Water Quality Standards (WQS), National Pollutant Discharge Elimination System (NPDES).

### **Skills:**

Microsoft Access Mac OS Data entry Microsoft Word Project Management Training Microsoft Excel Empathy Microsoft PowerPoint Communication Data Management Research Microsoft Outlook Windows OS Computer skills Multi-tasking Telephone skills Organization

### <u>Work</u> <u>History:</u>

Quality Assurance Coordinator to Present Quality Assurance Assistant 11/2016 to 11/2019 Eurofins Environment Testing Northwest Tacoma. WA 11/2019

- Overseed environmental laboratory quality assurance program to ensure compliance with environmental requirements, and resolve unusually complex, controversial, or sensitive environmental data problems.
- Served as a programmatic and technical expert on environmental data issues.
- Reviewed and implemented environmental technical standards, guidelines, policies, and formal regulations.
- Served as a representative for contract reviews, cooperative agreements, and interagency Agreements in accordance with federal regulations, and facility policies and practices.
- Utilized my knowledge of pertinent federal, state, and local laws and regulations, particularly
  the Clean Water Act (CWA) and/or the Safe Drinking Water Act (SDWA) and their respective
  implementing regulations (e.g., Total Maximum Daily Loads (TMDLs), Water Quality Standards
  (WQS), and the National Pollutant Discharge Elimination System (NPDES) to assess
  environmental data generated by the lab against these standards.

Environmental Health and Safety Coordinator to 11/2019
Eurofins Environment Testing Northwest
Tacoma, WA

11/2016

 Derived requirements and objectives for production system ergonomics based on industry standards, regulatory compliance or internal research

- Maintained and developed relationships with a wide range of internal and external partner organizations
- Found appropriate resources within or outside of the company to create employee requested solutions
- · Engaged in work groups to expand knowledge of technologies which may help the employee
- Developed equipment and system level human factors and ergonomics requirements, specifications, and standards.
- Gained working knowledge of industry and company specific human factors and ergonomics standards and design criteria.
- · Gained understanding of workstation designs

# Laboratory Technician

03/2015

to 11/2016

**Eurofins Environment Testing Northwest** 

Tacoma, WA

- Experience in operating, maintaining, and troubleshooting lab equipment (balances, water baths, sonicator, microwave, digestion block, ovens, etc.)
- Conducted metal and mercury digestions on soil, water, and waste samples (EPA 6010, EPA 6020, EPA 3050B, EPA 7471, EPA 7470).
- Conducted extractions for PCB, diesel, base neutral acids on soil, water, and waste samples (EPA 8081, EPA 8082, EPA 8270, EPA 3550, EPA 3546).

Research Assistant 02/2014

03/2012 to

University of Washington Tacoma WA

Tacoma,

- Developed and implemented new standard protocols used in laboratory
- Utilized Microsoft Word and Excel to conduct data analysis using statistics and write reports
- Performed sample analysis of house dust for precursor per-fluorinated compounds via gas chromatography/mass spectrometry
- Conducted meticulous research to develop cost-effective procedures to use in laboratory
- Experience in operating, maintaining, and troubleshooting lab equipment (balances, water baths, sonicator, microwave, digestion block, ovens, etc.)

#### Education:

Master of Science in Biotechnology (Bioinformatics): John Hopkins University - Baltimore, MD 2016

Bachelor of Science in Environmental Science: University of Washington Tacoma - Tacoma, WA 2012

# **Experience**

# Idaho Air National Guard - Project Manager, 124<sup>th</sup> Comm Flight, 11/2019- Present

SMSgt Bobbie Beck - 208.422.5840 40 hrs/wk GS11/3

- Manages communications/information technology projects for the Idaho Air National Guard's 124<sup>th</sup> Communications Flight using hybrid methods. Projects range from local initiatives to implementation of Guard-wide large scale projects.
- Coordinate and facilitate meetings with contracting offices, contractors, and stake holders concerning projects and programs. These meetings include initial customer interactions, design/planning, contract development, progress checks, and closeout steps.
- Researches, reviews, and interpret local, state, and federal environmental and fiscal laws – as appropriate – to ensure that the Idaho Air National Guard (IDANG) remains in compliance.
- Maintains CF-related programs including programs that provide communications capabilities for visiting units, mobile device management for more than 100 government users.
- Serves as Base Equipment Custodian Officer (BECO), managing IT hardware sustainment and replenishment for all of the Idaho Air National Guard. As the BECO, I manage an ITAM (Information Technology Asset Management) program valued at over \$5.6 million dollars.

#### Idaho Air National Guard - Traditional Guardsman

**3/2014-Present** 

MSgt Michael Diehl – 208.422.3245 hrs/m ~20

- Developed and conducted annual chemical training for 1200 Wing members.
- Maintained HAZMAT Awareness, Operations, Tech I, and Tech II certifications.
- IS-100, 120, 200, 700, 800, ICS-300 and 400 certified, maintained functional knowledge of National Incident management System.
- Prior member of response team with two main missions: emergency response to CBRN incidents and conducting wartime chemical incident mitigation.
- Developed localized incident and disaster recovery plans for Emergency Management flight, including accounting for environmental impacts of proposed actions.

- Project Manager in the Plans and Programs office at the 124<sup>th</sup>
   Communications Flight with same duties as listed in position above.
- Base Equipment Custodian Officer maintain accountability of base-wide ITAM with same scope as position listed above.

# Idaho Military Division - Engineering Technician, CFMO, IDARNG 4/2018- 11/2019

MAJ Ramesh Kreizenbeck – 208.272.4315 40 hrs/wk NGA-9(ID GS Equiv)

- Managed construction and renovation projects for the Idaho Army National Guard's Construction and Facility Management Office. This included the planning, design, execution, and closeout phases of large-scale construction projects
- Researched and assisted with design and layout of utilities and transportation infrastructure – both new and upgrades to existing - required for projects both on base and at the Orchard Combat Training Center.
- Inspected work throughout milestone progression to ensure projects were being completed correctly.
- Utilized hybrid project management principles depending on project goals and available resources.
- Organized and maintained post-construction procurement database.
- Worked closely with the IDARNG Environmental Management Office to interpret and follow local, state, and federal environmental guidelines/regulations when developing and implementing construction projects. Much of the implementation involved mitigating impact of proposed construction at the Orchard Combat Training Center located along the northern edge of the Great Basin Desert in the Western Snake River Plain.
- Oversaw environmental cleanup of facilities under renovation or modernization.
- Worked with customers to coordinate procurement of required postconstruction furniture, equipment, and IT infrastructure components for all CFMO construction and renovation projects state-wide.

# Idaho Military Division - Real Property Assistant, IDANG 9/2017-4/2018

Capt Matthew Mills – 208.422.5596 40 hrs/wk NGA7 (ID GS Equiv)

- Managed real property asset accountability for the Idaho Air National Guard.
- Coordinated base-wide real property audit, updating asset information for over 130 IDANG facilities.
- Spearheaded transfer of over 200 facilities from IDANG to IDARNG ownership.

# Idaho Air National Guard - Emergency Management Specialist 7/2017-9/2017

SMSgt Don Huffman - 208.422.5387

GS9/1

40 hrs/wk

- Temporary backfill for full time EM Specialist.
- Updated flight and base-wide training plans.
- Updated Wing, squadron, and flight contingency response plans to take into account modern response capabilities and environmental concerns.
- Managed logistics section of EM flight, coordinating deployment and reconciliation of accountable flight assets.
- Developed, implemented, and conducted multi-faceted CBRN response training scenarios for the EM flight.

## Isotope Geochemistry Lab, Boise State University Geosciences Dept.

### 8/2016 - 5/2017

Dr. Mark Schmitz – 208.426.5907 hrs/wk 20

- Used multiple industry-standard techniques to process mineral samples for research.
- Executed advanced sample processing methods and standards to advance collected samples through multiple physical and chemical tests.
- Utilized scanning electron microscopy (SEM) and laser ablative inductively coupled plasma mass spectrometry (LA-ICPMS) equipment and data to determine various characteristics of rock samples collected from around the globe. Data was used to compare relative age via radiometric dating, compare magmatic differentiation across numerous events from a single plume, or to compare compositional difference of multiple samples.

# Idaho Air National Guard - Installation Emergency Manager 5/2016-9/2016

SMSgt Don Huffman - 208.422.5387

GS9/1

40 hrs/wk

- Back-filled as the Installation Emergency Manager for the 124<sup>th</sup> Fighter Wing.
- Managed and directed day to day tasks and home-station training for nondeployed personnel, developing three junior airmen and
- Served as Emergency Operations Center Manager for contingency operations and exercises.
- Conducted numerous working groups focused on interagency contribution to threat mitigation and disaster recovery.

# **Ada County Information Technology**

11/2008 - 11/2013

Jeanne Urich (retired) - 208.287.7020

40 hrs/wk

- Provided IT support services to 130 users, including hardware and software support.
- Coordinated network-related support with systems team.
- Front-line educator on MS Windows, Office Suite, and custom in-house applications.
- Maintained and operated an AS400 server for County use.
- Purchased IT equipment for all Ada County users and systems, utilizing County and State laws, regulations, and guidance.
- Conducted inventories of over 1200 County PCs, servers, and related assets biennially.

## **Education**

# **Community College of the Air Force**

3/2014-2/2018

Associate of Science, Emergency Management, February 2018

 Degree awarded by the CCAF after completing all required training for present Air Force Specialty Code (AFSC), additional college credits in core, leadership, and technical courses. Coursework included transfer credits from Boise State, formal military education courses, and Air Force-specific technical training.

# **Boise State University**

6/2012 - 8/2017

Bachelor of Science, Geoscience major with Geology emphasis, summer 2017. GPA: 3.356

 Degree track focused primarily on geology, including geochemistry, geomorphology, geophysics, sedimentation/stratigraphy, structural geology, and hydrogeology classes as core requirements. Additional related courses taken include geophysics, volcanology, and advanced geochemistry research. The program included a capstone field camp that involved taking measurements and observations of numerous rock units across four states and interpreting the results, with professional quality maps and reports summarizing conclusions.

#### Skills

- Security + certified Aug 2020.
- Skilled with Waterfall and Agile project management concepts.

- Proficient at developing and implementing training for employees on various subjects using different learning styles as needed.
- Adept in Microsoft Office suite including Word, Excel, PowerPoint and Access.
- Accomplished in using and supporting Windows XP, 7 and 10.
- Familiar with various Apple macOS, iOS and productivity apps.
- Skilled at inventory database manipulation and associated real-world inventory correlation.
- Proficient in ESRI ArcGIS and related ArcCatalog database manipulation.
- Experience with scientific data analysis, modeling, and interpretation.
- Skilled at land navigation and geologic mapping in the field, including use of topo maps, compasses (including modified Silva, Brunton, and military lensatic models and techniques), field-standard measurement techniques, Jacobs staff use, and multiple coordinate systems (MGRS, UTM, WGS1984, etc.).
- HAZMAT Technician certified.
- Experience with hazard analysis of an installation, including threats from environmental hazards, attack, accidental release, and natural disasters.
- Skilled with use of military and civilian chem, bio, rad, nuclear and HAZMAT agent detection and sampling methods, including chain of custody requirements and procedures.
- Skilled at developing small-medium scale response scenarios based on given inputs, leading into hazard planning.
- Completed FEMA's current versions of IS-100, 120, 200, 700, 800 and ICS-300 and 400.

Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 002518501

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service):

Location(s) Applied to: Lacey, WA(US); Portland, OR(US); Seattle, WA(US)

Series Applied To: 0401, 1301

Resume

Country of Citizenship: United States

Country of Citizenship: United States

Availability: Job Type: Permanent

Recent Graduates

Work Schedule: Full-time

Part-time

Work Experience: NC Department Of Environmental Quality

09/2019 - Present

512 N. Salisbury Street

Salary: \$51,953.00 USD Per Year

Raleigh, NC 27604 US Hours per week: 40

Supervisor: Michelle Raquet (9195184635) Okay to contact this Supervisor: Yes

Environmental Specialist II/Water Resources Planner

• Leading the development and review of the Neuse River Basin and Catawba River Basin Management Plans, and assisting in the preparation of comprehensive water resource plans for the state's 16 other major river basins; • Data collection, analysis, and interpretation for inclusion in basin plans and presentations, . Geospatial analysis and map-making with ArcGIS and ArcGIS Online. • Developing reports to communicate complex environmental issues, policies, and data analyses to internal and public stakeholders. • Reviewing and providing comments on environmental review documents, environmental sensitivity analysis, and grant proposals,  $\bullet$  Identifying nutrient issues and recommendations to include in basin plans, and assisting with NPDES (National Pollution Discharge Elimination System) permit-related concerns, assessment, and recommendations. • Engaging internal and external experts on relevant issues from groundwater contribution of nutrients to atmospheric reactive nitrogen deposition; • Coordinating input and feedback between state and federal agencies, local governments, stakeholders, and the public. • Identifying where policies need to be updated to address water resource concerns, • Providing support for the implementation of Environment Management Commission approved recommendations in the basin plans to increase water resource protection, water security and reliability, protect and improve ecological integrity, and ensure fishable, swimmable,

and drinkable waters. • 319 Workgroup Member. Assisting with the review and selection of 319 Grant applications. Interviewing 319 Grant applicants.

NC Department Of Environmental Quality

09/2019 - Present

512 N. Salisbury Street

Salary: \$44,075.00 USD Per Year

Raleigh, NC 27604 US Hours per week: 40

Supervisor: Nat Wilson (9097079032)

Okay to contact this Supervisor: Contact me first

#### Environmental Specialist I

Supports the North Carolina Division of Water Resources (DWR) Ground Water Management Branch, Ground Water Quality Program through: • Collaboratively manage statewide ground water quality monitoring project; coordinating field work logistics; use field sampling equipment; and develop sampling priorities that align with the DWRs projects and goals. • Collect water quality samples from the state of North Carolina Monitoring Well Network to test for a broad suite of parameters to determine ambient ground water quality and identify potential anthropogenic impacts . • Manage and analyze ground water quality data with ArcGIS, SQL, MS Excel, MS Access, JMP, and R. • Compile and manage historical ground water quality data and import into the statewide ambient monitoring project database. • Review and revise best management practices, Standard Operating Procedures; and QAQC for data management and data collection. • Support collaboration with North Carolina State University by transferring water samples, sharing data, and supporting the integration of the DWR ground water sampling program with grant-funded research projects. • Develop an ArcGIS Online web mapping application to manage ground water quality data; and making the data available to the public.

Grantee

02/2018 - Present 1201 Constitution Ave

Salary: \$4,453.00 USD Per Month

Washington DC, DC 20004 US

Hours per week: 40

Supervisor: Brian D'Amico (2025661069) Okay to contact this Supervisor: Yes

ORISE Research Participant - USEPA Office of Ground Water and Drinking Water As an ORISE Research with the US EPA Office of Ground Water and Drinking Water's Drinking Water Protection Division in the Prevention Branch, I am working on a variety of projects focused on source water protection. My major duties and responsibilities include: -Provide written case studies on local source water collaboratives and source water protection projects to be featured on the Source Water Collaborative's website. - Assist in producing material and reviewing webinars for the Source Water Collaborative's Learning Exchange, an online information sharing platform focused on source water protection. -Conduct reviews and geospatial analysis on nutrient pollution data. The geospatial analysis is focused on NPDES permitted Nitrogen and Phosphorus discharges to determine areas of high concern across the united states. - Co-lead on a National Ground Water Awareness Week challenge. Responsibilities include conducting outreach and communication with the public and other federal agencies, designing and reviewing challenge materials, obtaining approval to to conduct the challenge, and reviewing challenge submissions. -Strong interpersonal communication skills. - Ability to provide quick turnaround on finished products. - Strong understanding and knowledge of the Clean Water Act and Safe Drinking Water Act.

Duke University, Nicholas School of The Environment 12/2015 - Present

450 Research Dr

Salary: \$3,000.00 USD Student Stipend Paid

Durham, NC 27708 US Hours per week: 10

Supervisor: Martin Doyle ((919) 613-8026)

Okay to contact this Supervisor: Contact me first

#### Teaching Assistantship

- Graded weekly written and excel assignments. - Walk through excel spread sheets and analysis of data required for weekly assignments. - Provided weekly office hours to assist students with topics covered in the Water Resources Management, Planning, & Finance course or further help with weekly assignments.

Appalachian Voices 08/2015 - Present 171 Grand Blvd

Salary: \$5,000.00 USD Student Stipend Paid

Boone, NC 28607 US Hours per week: 40

Supervisor: Erin Savage (2067698286) Okay to contact this Supervisor: Yes

#### Water Watch Associate

- Reviewed and analyzed Totals Maximum Daily Load's, National Pollutant Discharge Elimination System Prermits, and Discharge Monitoring Reports. - Traveled throughout the Appalachian regions of KY, TN, WV, and VA conducting and evaluating water quality test with the YSI Pro Plus equipment. - Conducted community outreach in areas impacted by coal mining, teaching community members how to partake in citizen science and conduct basic water quality assessments.

ChangeALifeUganda 05/2015 - Present

46 Oakmont Lane Jackson

Salary: \$6,000.00 USD Student Stipend Paid

Jackson, NJ 08527 US Hours per week: 40

Supervisor: Jean Semler (732 779 1899)

Okay to contact this Supervisor: Contact me first

#### Water Resource Consultant

This was a client based master's project for the Nicholas School of the Environment master's of environmental management degree. I along with two other students worked on and completed a project for our client ChangeALifeUganda as a student consultant from the Nicholas School of the Environment. Main components of the work consisted of: - Researched and established field sampling protocols. - Collected and analyzed bacteriological water quality testing, specifically for thermotolerant fecal coliforms. - Collected, analyzed, and interpreted chemical water quality samples. - Conducted community health and sanitation research through community outreach and household surveys. - Performed geospatial analysis and data collection, including the use of handheld GPS units and ArcGIS. - Community outreach, development, and administration of household water use, sanitation, and health surveys. - Organized, trained, and led a group of volunteers and field staff. - Drafted a report on the bacteriological and chemical conditions of the communities water supply and the health findings of the community. All findings and results were presented in an oral report to the client, classmates, and professors. The research required that three months were spent in Migyera, Uganda collecting water samples from boreholes, surface water, and households. Bacteriological and chemical tests were conducted on collected water samples, bacteriological tests were conducted in the field with a Del Aqua field incubator and chemical samples shipped back to Duke to perform

Inductively coupled plasma mass spectrometry, Ion-exchange chromatography. and Direct Current Plasma Emission Spectrometer tests.

Vengosh Research Group, Duke University

05/2015 - Present 450 Research Dr

Salary: \$10.00 USD Per Hour

Durham, NC 27708 US Hours per week: 10

#### Research & Lab Assistant

Assisted with lab work focusing on the water energy nexus: - prepared samples associated with hydraulic fracturing, coal ash, and coal mine runoff for IC-PMS, IC, and DC analysis. - Conducted routine maintenance of lab equipment.

Duke River Center, Duke University

05/2014 - Present 450 Research Dr

Salary: \$12.00 USD Per Hour

Durham, NC 27708 US Hours per week: 15

Supervisor: Brian McGlynn (4065992586)

Okay to contact this Supervisor: Contact me first

#### Research & Field Assistant

- Estimated hydraulic conductivity profiles for the Eno River ephemeral catchments using a compact constant head permeameter. - Installed wells and cop rods. - Conducted ICP-MS analysis on water samples.

State of Vermont Military Department

08/2012 - Present 108 Veterans Rd

Salary: \$12.00 USD Per Hour Colchester, VT 05446 US

Hours per week: 25

Supervisor: Michael O'Hara (8023383316)

Okay to contact this Supervisor: Contact me first

#### Environmental Technician Intern

- Manged the restoration of Pine Oak-Heath sand plain forest. - Conducted wildfire management and prescribed burns, invasive species management and removal. - Worked along side a contracted forester to assist in timber cruising and timber sales. - Used ATV's, backpack sprayers, drip touches, chainsaws and fire safety equipment. - Supervised four other staff members on an invasive species management and removal project. - Conducted direct herbicide application for removal of invasive species.

University of Vermont Park Studies Lab

05/2010 - Present 81 Carrigan Dr

Salary: \$10.00 USD Per Hour

313 Aiken Center Hours per week: 10

Supervisor: Bill Valliere (8026568873)

Okay to contact this Supervisor: Contact me first

Burlington, VT 05405 US

#### Work Study Research Assistant

- Conducted literature reviews. - Organized literature and field data. - Conducted data

entry for visitor impact surveys and transportation surveys. - Conducted field research, community outreach, and administered visitor impacts surveys in Burlington, VT and Acadia National Park, ME.

Education: Nicholas School of the Environment, Duke University

Durham, NC US - 05/2016

Major: Master of Forestry

Relevant Coursework, Licensures and Certifications:

Capstone Project: Affects of Reforestation on Stream Flow Characteristics of the Tyger River Courses: Advanced Topics in Modern Forestry Conservation Biology and Policy Economics of Forest Resources Forest Ecosystems Forest Management Travel Seminar Forest Measurements Forestry in the Public Interest Forestry Practicum Professional Communications Resource and Environmental Economics Silviculture Silviculture Site Prescription

Nicholas School of the Environment, Duke University Durham, NC US  $\,$ 

05/2016

- 05/2016

Major: Master of Environmental Management/Water Resource Management

Relevant Coursework, Licensures and Certifications:

Masters Project - Change A Life Uganda: Migyera Community Water Supply Project Courses: Advanced Ecohydrology Advanced GIS Applied Data Analysis for Environmental Sciences Biogeochemistry Ecology and Conservation of Streams and Rivers Fundamentals of GIS GIS for Water Quantity and Quality Assessment Landscape Hydrology Marine Ecology Soil Resources Water Resource Finance and Planning Water Resource Law Watershed Hydrology

University of Vermont Burlington, VT US

- 05/2012

Major: Environmental Science

GPA: 3.17

Relevant Coursework, Licensures and Certifications:

Advanced Agroecology Advanced Ecological Design Studio Applied Environmental Statistics Cacao and Agroforestry in Nicaragua Calculus 1 Calculus 2 Ecological Design and Lving Technologies Ecological Risk Assessment Ecology, Ecosystems, and the Environment Ecosystem Management: Integrating Science, Society, and Policy Environmental Problem Solving and Impact Assessment Exploring Biology Fundamentals of Soil Science General Chemistry 1 General Chemistry 2 Geotechniques Global Environmental Assessment Intro Organic Chemistry Intro to Geographic Information Systems Intro to Landscape Restoration Natural History & Field Ecology Natural History and Conservation of the American Southwest Permaculture Pollution Movement through Air, Land, and Water Power, Privilege, and the Environment Pre-Calculus Principles of Community Development Recovery & Restoration of Altered Ecosystems Social Processes and the Environment World Food, Population, and Development

Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 002465401

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service):

Location(s) Applied to: Portland, OR(US)

Series Applied To: 0401, 1301

Resume

Country of Citizenghin: United

Country of Citizenship: United States

Availability: Job Type: Permanent

Work Schedule: Full-time

Desired locations: United StatesWashington

Work Experience: Colorado State University's Center for Environmental Management of

Military Lands (CEMML)

09/2020 - Present

100-172 University Ave

Salary: \$97,500.00 USD Per Year

Fort Collins, CO 80524 US

Hours per week: 40

Supervisor: Liz Caldwell, PhD (970-491-8406)
Okay to contact this Supervisor: Contact me first

#### NEPA Specialist

- NEPA Program Manager at the Air National Guard Readiness Center, Joint Base Andrews, MD working alongside GS-13 and GS-14 employees within the environmental planning and compliance branch at the National Guard Bureau. - NGB NEPA lead for construction and basing Environmental Assessments. Coordinate with contractors (AECOM, TetraTech, Leidos), base FEMs and BCEs, and NGB program POCs (cultural, natural, hazardous waste, etc.) to bring the EA from start (PREIAP, kickoff call, site visit) to finish (signed FONSI) following the National Environmental Policy Act of 1969 [(NEPA), Title 42 United States Code (USC) Section 4321 et seq.], implemented by Council on Environmental Quality (CEQ) Regulations [Title 40, Code of Federal Regulations (CFR) 1500-1508] and 32 CFR 989, Environmental Impact Analysis Process (EIAP). - Conduct NEPA trainings for Environmental Managers and Base Civil Engineers for all of the Air National Guard bases across the United States. - Engage with stakeholders in all stages of the NEPA process to ensure continuity. - Reviewed and provided comments on new NEPA CEQ Regulations (2020). - Review Wetland Delineation Reports and Waters of the United States (WOTUS) reports associated with EAs for accuracy. - Assisted with the admin record to establish two new CATEXs- one of construction on less than 5 acres and one for demolition of non-historic buildings.

Colorado State University's Center for Environmental Management of Military Lands (CEMML)

09/2020 - Present

100-172 University Ave Fort Collins, CO 80524 US

Hours per week: 40

Supervisor: Liz Caldwell, PhD (970-491-8406) Okay to contact this Supervisor: Contact me first

#### NEPA Technician

- As the ANG NEPA Tool Lead, I provided support for the ANG'S NEPA program by reviewing all AF Form 813 submissions processed through the NEPA Tool and associated CATEXS. I analyzed hundreds of AF 813 forms from all ANG bases across the United States. - Coordinated with NGB program managers, programmers, and installation EMs and BCEs to ensure NEPA compliance on 813 submissions. - Ensured all EA/EIS documents matched between the A4AM share drives and VEMO page for each installation. - Participated in the development of quarterly NEPA training courses. - Continually championed to take on new responsibilities, such as leading Construction EAs and acting as assistant POC for the Environmental Baseline Survey (EBS) program. - After working tirelessly on brainstorming enhancements to the NEPA Tool, received kudos from the Environmental Quality Branch Chief expressing that not only did my efforts in the NEPA Tool streamline 813s in the ANG, but the hard work also paid dividends for RegAF as well. - Received Certificates of Completion for the Shipley Group's Applying the Air Force Environmental Impact Analysis Process training course and the Advisory Council on Historic Preservation's What is Section 106 training course.

AECOM

03/2019 - Present 525 Vine St Ste 1800 Cincinnati, OH 45202 US Hours per week: 50

Supervisor: Aaron Geckle (513-651-3440) Okay to contact this Supervisor: Yes

#### GIS Specialist

- Team member of GIS/Ecology Group specialized in remediation, mitigation, feasibility analysis studies, ROW analysis, environmental impact analysis assessments, site monitoring projects for decommissioned energy plants, power transmission line projects, underground gas pipeline distribution projects, construction projects, OPSB applications, and FERC filings. - Developed and maintained GIS databases, reports, and maps for over 20 ongoing and completed projects. - Led and assisted ecologists, geologists, hydrologists, and engineers with map creation for environmental permitting documents such as Wetland Delineation Reports and Stormwater Pollution Prevention Plans. - Created, organized, manipulated, and retrieved GIS data for reporting, analysis, and presentation purposes. - Position required a very high level of computer aptitude and competency, mastery of detail, specifications, and project specific guidance, as well teamwork and professionalism. The ability to meet and exceed deadlines and due dates without any flaws in performance was also essential.

United States Environmental Protection Agency (EPA)/Oak Ridge Associated Universities (ORAU)

12/2017 - Present

109 T.W. Alexander Drive

Durham, NC 27709 US Hours per week: 40

Supervisor: Drew Pilant, PhD (919-541-0648)

Okay to contact this Supervisor: Contact me first

EnviroAtlas Data Support Associate/Geospatial Analyst

- Developed meter-scale urban land cover data from aerial photography and lidar data using ENVI, Genie Pro, and eCognition image classification software. - Analyzed land cover maps for ecosystem services and sustainability. - Worked with classified, sensitive information. - Processed GIS data layers using ArcGIS 10.4.1. - Created training documents and work-flow documentation to assist and streamline processes for others to follow and utilize. - Performed quality control of geospatial data. - Created metadata and fact sheets supporting data products. - Performed literature reviews on high resolution land cover mapping methods.

Environment & Archaeology, LLC 11/2016 - Present 221 Main Street Florence, KY 41042 US Hours per week: 60

Supervisor: Sharon Brown (859-746-1778) Okay to contact this Supervisor: Yes

#### Biologist

- Conducted wetland delineations (Army Corps Wetland Delineation Manual, Ohio Rapid Assessment Method), stream assessments (Qualitative Habitat Evaluation Index/Headwater Habitat Evaluation Index), and endangered species habitat assessments. - Developed aerial, USDA soil, and topographic maps with NWI and FEMA Floodplain overlay using GIS ArcMap10.1. - Prepared Section 401/404 environmental permitting documents, NPDES erosion and sediment control plans, and Section 7 threatened and endangered species consultation letters for federal, state, and local public agencies; airport authorities; energy production and transmission corporations (Kinder Morgan-Tennessee Gas Pipeline Company, Dominion Transmission, Inc., ANR Pipeline Company-TransCanada); and private developers across the eastern United States.

United States Forest Service (USFS) & Sitka Conservation Society 04/2015 - Present 440 Church St Ann Arbor, MI 48109 US Hours per week: 25 Supervisor: Jeffrey Schaeffer, PhD (931-372-3609) Okay to contact this Supervisor: Yes

#### Student Research Consultant

- Collaborated with 8-member interdisciplinary team to critically assess current and past stream/riparian restoration efforts by the US Forest Service on Kruzof Island, Alaska. - Recommended quantitative and qualitative methods to monitor & manage aquatic and terrestrial responses to restoration via data collection, interpretation, and analysis. - Final product report given to the US Forest Service critiquing their current and past restoration work and providing recommendations for improvement in the form of an environmental monitoring/management plan: Kruzof and Baranof Islands Integrated Natural Resource Management Assessment (https://deepblue.lib.umich.edu/handle/2027.42/111004).

Education: Calvin College Grand Rapids, MI US

Major: Environmental Science

University of Michigan Ann Arbor, MI US

Major: Conservation Ecology

Job Related Training: - Shipley Group's Understanding the 2020 Revised CEQ NEPA Regulations (March 2021) -Shipley Group's Applying the Air Force Environmental Impact Analysis Process (April 2020) - Advisory Council on Historic Preservation's What is Section 106 (January 2020) -Wetland Delineation Training (October 2015) -State of Maryland Erosion and Sediment Control Certification (December 2015) -A Consulting Botanist's Toolkit PADCNR (Pennsylvania Department of Conservation and Natural Resources) (January 2016)

Languages: Spanish

Spoken: Novice Written: Novice Read: Novice

References: Christine Yott

USAF

Physical Scientist- Environmental

Phone Number: 240-612-8422

Email Address: christine.yott.1@us.af.mil

Reference Type: Professional

Liz Caldwell

Colorado State University

Associate Director

Phone Number: 970-491-8406

Email Address: liz.caldwell@colostate.edu

Reference Type: Professional

Joseph Sundy

USAF

Lieutenant Colonel

Phone Number: 240-612-9557

Email Address: joseph.sundy.2@us.af.mil

Reference Type: Professional

**CURRENT POSITION:** Physical Scientist (Environmental) GS-12 CURRENT EMPLOYER: Department of Defense (DOD), United States (US) Air Force Civil Engineer Center (AFCEC) **ROLES AND RESPONSIBILITIES**: Mr. serves on the AFCEC Alaska Installation Support Section (ISS) Team for Joint Base Elmendorf Richardson (JBER), Eielson Air Force Base (AFB), Clear Space Force Station (CSFS), and the 611TH where he manages Water Quality, Spills, and Tanks for 24 active AF Installations. EDUCATION: Master's Degree, School of Engineering; Applied Environmental Science and Technology, 2013. University of Alaska, Anchorage; Bachelor of Science Degree, School of Ocean and Fish Sciences; Fishery Science, 1994. University of Washington QUALIFICATIONS AND EXPERIENCE: Mr. has 23 years of professional scientific and environmental work experience throughout Alaska managing people and projects in both urban and rural locations. He has been a supervisor and project manager for many environmental field projects and field personnel overseeing several teams of environmental professionals throughout his professional career and is accustomed to handling personnel issues, managing budgets, writing and editing repots, and providing technical regulatory expertise for many environmental medias. He has vast knowledge of applicable United States Air Force (AF) health and safety requirements as outlined in job related safety standards, regulations and orders. This is validated by continuous learning credits, trainings, educational classes, plus keeping up to date with the latest AF safety guidance documents. has assisted and led environmental projects working as a contractor for the AF, as well as commercial and private entities, State of Alaska (SOA), and private sector firms. He also has vast experience working on Clean Water Act (CWA) Compliance Projects, AK Railroad spur projects, National Environmental Policy Act and permitting projects, off-shore oil and gas exploration projects, as well as thirteen years in project management and supervision for dozens of remote scientific field camps throughout AK. Mr. has worked as a SOA Regulator, Regional Resource and Development Biologist, Deputized Peace Officer, Wetlands Coordinator, and Oil and Gas Environmental Permitting Lead. He has many years of experience acquiring and leading projects throughout Alaska starting from the proposal stage, and moving through budgeting strategy, team building, project execution, reporting deliverables, billing, project close-out and debriefing phase. Currently, Mr. is working for the Department of Defense (DOD) as an

Environmental Media Manager for AFCEC, Alaska Installation Support Section (ISS).

**EMPLOYMENT HISTORY**: **DOD, USAF-Physical Scientist GS-12 (9/2018-present, fulltime, 40 hours/week)** Mr. serves as an environmental professional working at JBER for the Environmental Program Office with the AK-ISS where he responsible for providing AFCEC support to three environmental media programs (Water Quality, Tanks, and Spills) at 24 active AF installations (JBER, Eielson, Clear, and the 611TH). He provides contract execution and programming services, product oversight, and technical support by having knowledge of construction and service contracting procedures relevant to executing environmental related contracts.

Mr. provides: professional and technical environmental services to seven base-level media program managers (PMs); guidance and interpretations of environmental laws, regulations, and instructions; support in achieving compliance with environmental regulations, thereby preventing issuances of enforcement actions for his respective media programs. He communicates critical issues to other ISS staff members, serviced installations, and superiors. He is knowledgeable in the current U.S. environmental laws and regulations regarding Clean Water Act, Safe Drinking Water Act, Spills and Tanks promulgated by both Environmental Protection Agency and SOA Department of Environmental Conservation, DoD, and AF instructions 32-7001, AF Manual (AFMAN) 32-1067, media and administrative policies, directives, and applicable agreements as well as professional knowledge of new applications or developments in environmental programs for water, spills and tanks.

Mr. works with AF Base PMs to ensure all of their program needs are met by engaging with them weekly via email, teleconferences, MS TEAMS, and one-on-one phone calls. He works with them to craft performance work statements (PWS) thereby ensuring zero gaps for environmental contractor services. Mr. works with AF Contracting Officer's Representatives (CORs) to accomplish base level contracting needs for projects in and out of cycle and has successfully completed emergent project requests and funding line adjustments (FLAs) working with his chief. In the last three years, he has acquired knowledge of AF programming, budget, and funding processes from his compliance chief and has the ability to forecast, develop, and evaluate resource requirements pertaining to all environmental programs. He is gaining knowledge of all existing operations with special emphasis on over fifteen years of professional knowledge of environmental program management.

He worked two years with AK ISS team members and Base PMs, AK ISS Chief, and the United States Army Corps of Engineers (USACE) COR to bring AK's first Fence to Fence (F2F) contract online by August 2020 and has recently engaged in the initial process for this contract's renewal effort for 2025. He also functions as a Unit Effectiveness Inspector for the Pacific Air Forces/Inspector General Team traveling to various AF installations stateside and overseas. He provides training as needed to base PMs, facility mangers, and Unit Environmental Coordinators. He also manages many AF program databases: EASIER, AFINS, APIMS STAR/WET, PPBE Acquisition Tracker, ACES PM, and Plans and Permit Tracker, Enterprise Environmental, Safety and Occupational Health-Management Information System, and Continuing

Evaluation Tool found on e-DASH. Mr. works with base PMs by validating potential projects working within the EQ Programming Guide and Program Matrix and if not eligible, searches for other funding sources like Facilities Sustainment, Restoration, and Modernization programmed projects with Environmental Quality driver, FLA process, or reaches out to CZTQ for possible contract vehicles. He assists with writing Statements of Work and crafting independent government estimates, and programs base projects in ACES PM working through the Regional Support Branch and Subject Matter Expert approval process as well as performing technical evaluations on contractor proposals. Mr. Palmer has been very active in many environment teams and groups for the last three and a half years working with other AF professionals: Storage Tank Tiger Team, Water Panel Compliance Action Team, 611TH CFT, JBER Contractor Base Pass Liaison to Security Forces, and IBER's Storm Water Working Group. Mr. is very familiar with Air Force Instructions (AFI) and AFMANs relative to his medias, more specifically, AFI 32-7001 and AFMAN 32-1067 and he was also instrumental in providing edits and comments to both Business Rule 29 (F2F) and 39 (Spill/Item of Interest Reporting) and the CWA Playbook re-write for 2022. Mr. Palmer takes all of his required annual AF Trainings and also supplements those with courses recommended by his Compliance and Branch Chiefs.

Mr. has demonstrated to his Chiefs his ability to effectively communicate via a formal briefing (IG/UEI briefs and debriefs) and in a public speaking forum (HI and AK PMRE Presentations) and has developed concise written technical information appropriate for any specific audience evidenced by numerous SOWs/PWS, IOIs developed for HAF, and comments to the commander to support PPT weekly entries.

Bethel Environmental Solutions LLC -Senior Environmental Scientist (1/2017-9/2018, fulltime, 40-50 hours/week) Mr. conducted technical field work throughout remote locations in AK as a remediation project manager for AF Contracts. He supervised staff in the collection of soil and water samples at various AF bases and remote AK locations and was considered by Alaska Department of Environmental Conservation (ADEC) as a qualified sampler. He was also responsible for crafting work plans, reviewing analytical sample results, and writing reports. Mr. was also the lead water quality specialist and storm water inspector for the CWA Project Inspections and Support for JBER, AK. As part of was responsible for ensuring compliance with JBER's this project, Mr. Industrial Wastewater Discharge Permit, Multi- Sector General Permit (MSGP), and Municipal Storm Sewer Systems (MS4) permit. He supervised all tasks associated with the project and assured that compliance deadlines were met. As part of the AF's Integrated Solid Waste Management Project (ISWMP), Mr. Lead for installations at various Long Range Radar Sites in AK. He coordinated the site visit logistics for his installations and conducted site surveys, observed solid waste management operations and interviewed ISWM managers. Mr. the information gathered during these site visits to update the ISWMPs into the new format that had been recently mandated for use across all AF installations.

Municipality of Anchorage, Development Services, Building Safety - Building Plan Reviewer (9/2015- 1/2017, fulltime, 40 hours/week) Mr. Palmer

enforced the Municipality of Anchorage's Title 23, navigating complex building codes and reviewing technical architectural plans for permit approval for residential and commercial construction.

Apache Oil and Gas Company – Environmental Permit Coordinator (9/2014-9/2015, fulltime, 40 hours/week) Mr. procured federal, state, and local environmental permits for oil and gas exploration and development. He had constant interactions with federal, state, and local regulators as well as various stakeholders to ensure compliance with laws and regulations pertaining to the preservation of marine mammals, wetlands, migratory birds, and aquatic resources. Mr. developed and submitted reports for environmental services approval to meet all regulatory requirements necessary to maintain compliance with operating permits. He provided technical input to assist in the development of project planning, prepared financial analyses of environmental impacts on exploratory operations, and developed environmental management systems to effectively manage the limitations and restrictions imposed by operating permits.

ADEC, Division of Water - Wetlands Coordinator (1/2007-12/2010, fulltime, 37.5 hours/week) Mr. led Water Quality Management Programs for the National Pollutant Discharge Elimination System (NPDES) and the Alaska Pollutant Discharge Elimination System (APDES) and had a key role writing the EPA application for the SOA to gain primacy of the NPDES Wastewater Discharge Permitting and Compliance Program. He performed in a statewide lead position for implementing Section 401 of the CWA for wetlands permits under Section 404 of the CWA throughout AK. He implemented the department's 401 Certification of Reasonable Assurance program statewide pertaining to federal, primarily USACE, permits and the water quality impacts caused by associated development activities throughout AK. Mr. worked cooperatively with the regulated public and other federal and state resource agencies to review and determine state approvals of development activities.

Alaska Department of Fish and Game - Regional Resource and Development Biologist, Supervisory Fishery Biologist II, Fishery Biologist I, and Fish and Wildlife Technician II (5/1999-1/2007, fulltime, 37.5 **hours/week)** Mr. worked with multiple stakeholders, including Commercial, Sport, and Subsistence Divisions, Regional Planning Teams, Association of Village Council Presidents, Native Corporations, and other various Stakeholder Organizations to manage and conduct a variety of natural resource projects throughout AK. He reviewed and made recommendations to the region on all Fish Transport Permits, Fish Resource Permits, Annual Management Plans, Private Non-Profit (PNP) Hatchery Applications and Permit Alteration Requests for Cook Inlet and Prince William Sound, (appx. 150/year). Mr. served as the primary liaison for Mari-culture issues for Region II, Commercial Fisheries Division, assisted in planning, developing, writing and annually amending Comprehensive Salmon Plans for Prince William Sound and Cook Inlet, as provided for in AS 16.10.375. Tracked the progress and coordinated the review of Federal subsistence regulatory proposals affecting Central Region fishery resources. He attended meetings with staff from the Office of Subsistence Management, Federal Subsistence Board and Regional Subsistence

Advisory Councils as well as AK Board of Fisheries Meetings while taking the charge of writing committee reports. As a Fishery Biologist I, Mr. was the crew leader for a remote field project on the Aniak River where he supervised four fish technicians in the use of hydro-acoustic equipment, beach seine fishing and gill net fishing techniques. He monitored sonar equipment and the collection of biological samples from beach seine caught chum salmon.

**References:** Please see USAJOBS applicant profile or available upon request.

**Professional Training and Certificates**: WENV 541-22C Water Quality Management – enrolled; Squadron Officer School – enrolled; WENV 350 Environmental Management Systems Auditing Course 2019, Environmental Contracting Course 418 19B, 2019; Certified Erosion and Sediment Control Lead, 2020

Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 002571370

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service): Location(s) Applied to: Portland, OR(US); Seattle, WA(US)

Series Applied To: 0801, 1301

Resume

Country of Citizenship: United States

Availability: Job Type: Permanent

Work Schedule: Full-time

Work Experience: New York City Department of Environmental Protection

03/2019 - Present

59-17 Junction Blvd. Flushing, NY 11373 United States

Elmhurst, NY 11373 US Hours per week: 35

Supervisor: : Shailendra Koya (7185956305)

Okay to contact this Supervisor: Yes

#### Environmental Engineer

• Participated in field and research efforts aimed at updating advancements in air and noise mitigation techniques and improving compliance with both the city's air and noise pollution control codes • Evaluated construction sites and equipment for compliance with NFPA, OSHA, and federal and state codes such as EPA. • Participated in multi-agency efforts to address mobile source emission issues for NYC • Attended project related meetings that included community members, elected officials, construction project staff, developer, etc. to ensure that the most effective noise mitigation measures are included.

• Responsible for all permits for air emission and Noise mitigation issued within preestablished periods. • Responsible for the enforcement of environmental laws and regulations, which affect the health and safety of the public and environment. • Regularly respond to air and noise code complaints, inspect and foster the goals of environmental protection. •Prepared and submits departmental reports and presentations. • Oversee, inspectors and support staff to manage the Air/Noise Policy &Enforcement Units

Office of Queens Borough President

10/2016 - 03/2019

120-55 Queens Blvd. Kew Gardens, NY 11424 United States

Jamaica, NY 11424 US Hours per week: 35

Supervisor: Clara Viuker (7182863000)

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Okay to contact this Supervisor: Contact me first

#### Engineering Technician

• Reviewed the environmental laws and building codes • Issued the house numbers and vanity addresses in the Borough of Queens • Analyzed the sewer data and street elevation data for the Borough of Queens. • Prepared written reports of street title status for NYCDEP sewer capital projects and capital projects of other city agencies. • Assisted in design, computation of street alteration maps and damage and acquisition maps in municipal and residential zoning • Analyzed survey data on the maintenance of streets and monuments • Utilized Computer Aided Drafting (CAD) software in analyzing topographical records

NYC Department of Transportation 11/2015 - 06/2016 55 Water Street New York, NY New York, NY 10041 US Hours per week: 25

Supervisor: Susan McSherry (212 839 4544)

Okay to contact this Supervisor: Contact me first

#### Data Visualization Specialist

•Analyzed the AVL (automotive vehicle location) data •Developed the scenarios to aggregate the data and visualized the environmental impacts such as air and noise pollution, and health impacts on the community. •Prepared written reports on hours of operation, location of travel and idle of trucks in NYC •Utilized GIS, Microsoft excel, SQL in analyzing truck AVL data

Education: The City College of New York

New York, NY US Bachelor's degree Semester Hours

Major: Environmental Engineering

Minor: Geology

The City College of New York

New York, NY US Master's degree Semester Hours

Major: Environmental Engineering

Job Related Training: 40 hour Hazwoper Training. Community Noise Enforcement Training Lean

Six Sigma Green Belt

References: Dr. Liubov Kreminska Phone Number: (212) 650-8299

Email Address: lkreminska@ccny.cuny.edu

Reference Type: Professional

Shailendra Koya

Phone Number: 7185956305

Email Address: skoya@dep.nyc.gov Reference Type: Professional

#### **Professional Summary & Career Objective**

Master's in Engineering with over 20 years of extensive experience in managing product design, validation and new product development program. Strong international leadership experience in driving product and process improvement initiatives across worldwide cross-functional business units. Proven track record of successfully directing enterprise-wide multi-functional teams to coordinate engineering, manufacturing, purchasing, supply chain & marketing functions in developing new products as well as deliver Continuous Product Improvements (CPI) on existing products.

Additional accomplishments include federal acquisition construction project management serving as Contracting Officer's Representative (COR) for Dept of Veteran's Affairs. Well versed in Federal Acquisition Regulation (FAR) standards.

I am looking for a challenging opportunity in a reputed organization to utilize my technical leadership & engineering analysis skills to accomplish organization's targets as well as further expand my knowledge base with meaningful contributions towards organization's long-term goals.

#### Specific Expertise

- Certified Contracting Officer's Representative (COR) Level 2
- Global Technical Leadership / Project Management
- Product Development
- Continuous Product and Process Quality Improvements (CPI) / Reliability Engineering
- Team Building
- Certified DMAIC Six Sigma Black Belt (Statistical Quality Engineering)
- Mathematical Analysis & Modelling / Statistical Analysis
- Data mining / Data Analysis / Data Modelling
- Engineering / Technical Analysis

#### Education

1) Master of Science in Mechanical Engineering (August 2005)

Montana State University, Bozeman, MT, USA

**Concentration** – Thermal and Fluids Engineering

**Graduate Courses** – Advanced Fluid Mechanics, Advanced Heat Transfer, Transport Phenomena, Advanced Engineering Analysis, Finite Element Analysis, Statistical Data Analysis, Fracture Mechanics, Continuum Mechanics. **Thesis** – A Numerical Investigation of Thermal-Hydraulic Characteristics in Three-Dimensional Plate and Wavy Fin-Tube Heat Exchangers for Laminar and Transitional Flow Regimes (Advisor – Dr. R. Amin)

2) Bachelor of Science in Mechanical Engineering (August 2000)

Pune University, Pune, INDIA

**Relevant Courses** – Industrial Management, Heat Transfer, Fluid Mechanics, Thermodynamics, Engineering Mechanics, Data Analysis, Machine Design, Metallurgy, Engineering Drawing.

#### Certifications

- FCR 110 Contracting Officer's Representative (COR) Level 1 US Dept. of Veteran's Affairs (VA) (2022)
- FCR 201 Contracting Officer's Representative (COR) Level 2 US Dept. of Veteran's Affairs (VA) (2022)
- Six Sigma DMAIC Project Management Black Belt Certification (Statistical Quality Data Analysis) Caterpillar (2014)
- Six Sigma DMAIC Quality Management Green Belt Certification (Statistical Quality Data Analysis) Caterpillar (2008)

#### **Patents**

"METHOD AND SYSTEM FOR RELEASING PARKING BRAKE OF AN ANCHORED MACHINE"

<u>US Patent number:</u> 20140062178 <u>Application:</u> March 6, 2014 <u>Assignee:</u> Caterpillar Inc.

Inventors: Satchit Pradip Panse, Paul Watts, Jinglian Sun, Frank Arriaga, Mark Thompson

#### **Publications**

"Numerical Investigation of Performance Characteristics of Plate and Wavy Fin Tube Heat Exchangers in Transitional Flow Regime", Dr. R. Amin and Satchit Panse, 13<sup>th</sup> International Heat Transfer Conference, Sydney, Australia (Aug. 2006).

#### **Project Work Experience**

(1) US Dept. of Veteran's Affairs, Chicago, IL USA (Mar 2022 – Current) Supervisory Facility Planning Engineer (Jesse Brown VA Medical Center - Chicago)

As facility planning engineer & capital asset manager, this position provides professional engineering consultation, engineering design, acquisition and construction phased services in the preparation, approval, funding, and execution of the Medical Center SCIP (Strategic Capital Investment Plan)

#### **Roles and Responsibilities:**

- Serves as the Facility's Capital Asset and Space Program Manager. Prepares proposals for new/revised space
  assignments or the development of new construction or renovation projects, leases, or other alternatives to resolve
  specific space deficiencies throughout the Medical Center.
- Participates fully in the development of proposed minor and major construction projects assisting in preparation of Capital Asset Applications (OMB300's), concept development, space programming, the provision of swing space, phasing plans and assistance in the development of activation resources packages.
- Assesses potential VA-owned or leased sites for new project/building development on the healthcare system's campuses as well as build to suit minor and major leases on GSA, and commercially available property throughout the healthcare system's catchment area. Performs economic analysis and preparation of business cases as a basis to justify projects for National and Regional Office funding prioritization.
- Currently working as Contracting Officer Representative (COR) for VISN 12 contract on construction project replacing NFS Kitchen Hood & Fan system at Jesse Brown VA Medical Center, Chicago. Contract valued at \$1M.

(2) CATERPILLAR INC., Aurora, IL, USA (Jan 2013 – Current) 6 Sigma Blackbelt (Engineering Project Team Leader) (Caterpillar Medium Wheel Loaders – Prime Product CPI Team)

As Senior Engineering Team Leader (6 Sigma Blackbelt) of Continuous Product Improvement (CPI) group responsible for managing worldwide Caterpillar K & M-Series Wheel Loader quality improvement program, this position leads product design & process improvements that enhance Caterpillar wheel loader performance, durability, reliability, and quality characteristics in order reduce warranty costs.

#### **Roles and Responsibilities:**

- Provide technical leadership to the interfacing engineering teams to deliver Continuous Product Improvements (CPI) in resolution of product build & field operation issues to raise the quality/reliability performance on Caterpillar MWL products. This position oversees various MWL models under multiple product generations. Examples of these Caterpillar MWL products are Tier4 Interim emission compliant models such as 950K/962K, 966K/972K & 980K Series Machines as well as next generation Tier4 Final emission compliant models such as 950M/962M, 966M/972M & 980M Series MWL products.
- Direct & coordinate the team of engineers that support the core design project work for Continuous Product Improvements on multiple product systems to achieve MWL quality improvement targets. This position leads & directs product improvement design projects on various MWL product systems. Examples of such multiple MWL product systems overseen by this position include Light Fabrications (engine hood & components, handrails/ladders, hydraulic service & battery enclosures, miscellaneous support hardware etc.), Heavy Structures (front/rear frames, lift/tilt levers, counterweights, cross-members etc.), Hydraulic Installation (hydraulic hose & tube routings for main valve, lift, tilt & steering lines), Engine Installation (engine & emission package components and mountings) Cooling Package (fan/radiator, water/oil cooling related routings) etc.
- Provide leadership and direction to Enterprise-wide multi-functional teams on product improvement programs and
  establish performance, quality, and cost targets along with execution timelines. Coordinate core engineering teams
  with product support teams to identify, plan and prioritize emerging product quality problems that affect customer
  satisfaction. Guide improvement concept selection & technical specifications shorten resolution times and
  justify/monitor capital investments. Direct & develop teamwork breakdown structures and project workbench activities.
  Direct test plans based on risk assessment and review all engineering, test & validation plans to ensure successful
  product/process improvement introductions.

(3) CATERPILLAR INC., Suzhou, China - CSCL (November 2011 – Jan 2013)
Engineering Team Leader
(China Segment & Growth Solutions Medium Wheel Loader Product Engineering Team)

As Engineering Team Leader of the Segment & Growth (S&G) group responsible for managing worldwide Caterpillar H-Series Wheel Loader niche market product program, this position led the development of specialized custom wheel loader designs & integrated solutions that met Caterpillar performance, quality and cost targets in order to capture market share for these special application loader machines.

#### Roles and Responsibilities:

- Lead the worldwide cross-functional engineering teams to deliver custom application arrangements & special customized attachments targeted for specific market segments on Caterpillar 950H/962H, 966H/972H & 980H Series Medium Wheel Loader machine models. Examples of such custom model designs include special wheel loader configurations for extreme applications like Steel Mill application, Underground Mining application, Industrial & Waste application, Logging/Forestry application, Block Handling application etc.
- Direct engineering teams that support the core design project work for customized applications on multiple product areas & systems in order to deliver product designs that meet special customer application requirements. Examples of such multiple MWL product areas overseen by this position for design improvements include Light Fabrications (engine hood and components, handrails/ladders, hydraulic service & battery enclosures, miscellaneous support hardware etc.), Heavy Structures (front/rear frame & components, lift/tilt levers, counterweights, cross-members etc.), Hydraulic Installation (hydraulic hose & tube routings for main valve, lift, tilt & steering lines), Engine Installation (engine and emission package components & mountings etc.) Cooling Package (fan/radiator, water/oil cooling lines and related routings) etc.
- Provide leadership and direction to Enterprise-wide multi-functional teams on custom product development programs
  and establish performance, quality, and cost targets along with execution timelines. Coordinate core engineering
  teams with commercial & marketing teams to identify, plan and prioritize critical customer requirements. Guide
  concept selection & technical specifications shorten resolution times and justify/monitor capital investments. Direct &
  develop teamwork breakdown structures and project workbench activities. Direct test plans based on risk assessment
  and review all engineering, test & validation plans to ensure successful custom product introductions.

(4) CATERPILLAR INC., Aurora, IL, USA (September 2007 – October 2011) Design Engineer (Caterpillar Medium Wheel Loaders – Product Engineering Team)

This position was responsible to provide design & analysis engineering expertise in resolution of product build and field follow CPI/quality issues on Caterpillar H-series Medium Wheel Loader (MWL) machines to improve durability/reliability characteristics and reduce warranty costs.

#### Roles and Responsibilities:

- Led several projects to perform high level concepts to hard design/analysis activities using Pro/E Wildfire, Pro/E
  Mechanica, Pro/E FluidLines Piping package, tolerance stack-up and related tools to avoid early hour & field failures,
  warranty costs, assembly causes of design etc. on CAT H-series medium wheel loader machines.
- Projects covered design improvements on a multiple product areas & systems such as Light Fabrications, Heavy Structures, Hydraulic Installation & Routings, Cooling Package, Engine Installation etc.
- Led cross functional teams to provide product design/reliability improvements from initiating ideas to developing detailed designs using Pro/E tools, developed prototypes for validation, worked with various suppliers/customers (both internal & external) to develop cost estimates, build worldwide Caterpillar team consensus and meet CPI cost, time and reliability metrics.
- Performed required engineering analysis using sound engineering principles to provide design improvements e.g.
   FEA structural stress analysis using Pro/Mechanica to ensure structural reliability, GD&T & tolerance stack up analysis to ensure fit/form/function of the designs etc.
- Developed test and validation plans for design improvements through lab & field test procedures.
- Successfully led & completed several assignments that improved performance, reliability, serviceability, and customer satisfaction of CAT H-Series medium wheel loaders. Leveraged technology was communicated and utilized on CAT next series (K & L-series) Medium Wheel Loader NPI programs.

# (5) NORTHERN TECHNOLOGY INC., IL, USA (December 2005 – September 2007) Consulting Design Engineer Client – Caterpillar Inc., Aurora, IL, USA (Medium Wheel Loaders Product Engineering Team)

This position was responsible to provide new design concepts, improve existing designs and perform required analysis using mechanical/hydraulic principles during production ramp-up of Caterpillar H-series Medium Wheel Loader (MWL) machines. Primary goal of this position was to provide design improvements to avoid early hour failures and improve quality/reliability within assembly operations across world-wide Caterpillar production lines during H-series production ramp-up.

#### Roles and Responsibilities:

- Led several assignments related to design/process improvements during H-series production ramp-up on multiple product areas such as such as Light Fabrications, Large Structures, Hydraulic Installation, Cooling Packages, Engine Installation etc.
- Provided design improvements using Pro/E Wildfire & Pro/E FluidLines to improve product quality/reliability of hydraulic line routings & installation across the entire CAT H-Series model line-up
- Designed associated component installation hardware such as manifolds, brackets, and light fabrications as required for the design improvements within cost, performance & reliability metrics.
- Identified assembly/quality issues affecting product reliability, initiated ideas for design improvements, 3D modeled the
  solution concepts, performed needed analysis such as tolerance stack-ups & FEA, released the designs/drawings to
  production and communicate results to cross functional teams e.g. customers, suppliers, and worldwide CAT
  business units to improve product build reliability and velocity.

# (6) MONTANA STATE UNIVERSITY, Bozeman, MT, USA (September 2001 – August 2005) ME Graduate Research Associate (Thermal / Fluids Engineering) (Mechanical & Industrial Engineering Department)

As a Graduate Research Associate with the Mechanical & Industrial Engineering Department at Montana State University; led graduate thesis research project that involved thermo-fluid modeling of compact heat exchangers. This project was an integral part of my mechanical engineering Master's degree thesis.

#### Roles and Responsibilities:

- The thesis project involved in-depth thermo–hydraulic modeling of the compact heat exchangers with the applications related heating, air-conditioning and refrigeration industries.
- The heat transfer and flow friction characteristics of the compact heat exchangers were evaluated by using threedimensional numerical modeling.
- The project involved Computational Fluid Dynamics (CFD) analysis, thermal analysis, 3D CAD modeling, structural stability analysis using FEA.
- Designed various 3D solid models using Pro/E and analyzed them to test functional accuracy. Designed assembly models using Pro/E (2001) consisting of multiple parts of compact heat exchanger.
- Perform thermal, hydraulic and structural analysis of heat exchanger operation using CFX.
- Perform a variety of engineering tasks; work includes performing necessary technical analysis as well as giving oral
  presentations to communicate results and writing research proposals.
- Perform design calculations and research design alternatives. Closed form analytical solutions are routinely developed to verify the numerical analysis results.

(7) TRW Inc., Jamestown, ND, USA (July 2002 – Dec 2002) Design Engineer (Graduate Internship) (Aeronautical Cargo System Design Team)

The Jamestown, ND business unit of **TRW Inc.** specializes in the design, manufacturing and assembly of the aeronautical cargo systems. The clients include **Boeing (747/767/777)**, **Airbus (A300/A310)** and **Lockheed Martin**.

#### Roles and Responsibilities

- Part of team that managed design changes according to market requirements and client specifications while
  maintaining structural stability of various components for the Boeing (747/767) lower deck and main deck cargo
  systems such as roller assemblies, power drive units, restraint latches etc.
- A major part of the responsibility included interacting with the client (Boeing), production & assembly managers as well as other cross functional teams and coordinating design changes according to the client requirements.
- The projects involved mechanical design and structural analysis of the systems, CAD modeling, Pneumatics-Hydraulic design, Finite Element Analysis (FEA) and product development.
- Responsible for Product Design, modeling sheet metal parts and design of complex assemblies that complies with customer specifications and current industry standards.

# (8) BAJAJ TEMPO Ltd., Pune, INDIA (August 2000 – August 2001) Product Design Engineer (Graduate Engineering Trainee) (Automobile Systems R&D Team)

**Bajaj Tempo Ltd.** is a leading automobile manufacturing company from India which specializes in manufacturing Light Commercial Vehicles, Utility Vehicles, Agricultural Tractors and Three-Wheeled vehicles.

#### Roles and Responsibilities

- Worked with the Research and Development (R&D) department at Bajaj Tempo Ltd. as a Product Design Engineer.
- Worked with the design group that is responsible for the chassis component design and structural stability for the light commercial vehicle models offered by the Bajaj Tempo Ltd. (Excel 4 & Excel 3 light commercial vehicle models).
- Worked on various projects that involved chassis component design & light fabrications as well as structural analysis
  of automotive systems (suspension/steering/axle support hardware, chassis weld components etc.) for the existing as
  well as NPI program vehicle models (Excel -5 and Excel -6) offered by Bajaj Tempo Ltd.
- These projects involved mechanical design, 2D and 3D CAD modeling, Finite Element Analysis (FEA), Product design
  and development for automobile structures and coordination among the project groups.
- Lead the concept and design work of vehicle chassis & light fabrication components.
- Participate in vehicle level and system level FMEA and APQP risk assessment process.
- Participate in Design Reviews & product audits (assemble-ability, serviceability and safety) on NPI program.
- Contributing to meeting cost and quality targets and production deadlines for the NPI platform.

#### (9) TATA ENGINEERING LTD. (TELCO), Pune, INDIA (June 1998 – June 2000) Material Handling Equipment Design Engineer (Undergraduate Engineering Intern) (Automobile Material Handling System Design Group)

**Tata Engineering Ltd.** is the largest automobile manufacturing company from India which specializes in manufacturing Passenger cars, Multi-Utility Vehicles, Heavy and Light Commercial Vehicles.

#### **Roles and Responsibilities**

- Worked with the plant growth unit at the Tata Engineering Ltd. which is responsible for designing different automobile material handling systems such as automobile body weld, paint & assembly fixtures for commercial vehicle models.
- Worked on several projects that involved development, design, drafting and analysis of different material handling systems for the automobile assemblies (slat conveyors, vehicle assembly weld fixtures, vehicle body paint conveyors etc.) for various multi-utility and commercial vehicle models.
- These projects involved mechanical drafting and design, structural engineering analysis, Pneumatics-Hydraulic design and 2D - 3D CAD modeling.
- Involved in Design, Development and Performance testing of Light Commercial Vehicle Assembly Conveyor as well as Sports Utility Vehicle Weld Fixture.
- Conduct Design Reviews for ongoing projects and follow-up with cross functional teams to meet project deadlines.
- Work with stress engineers to carry out FEA analysis and scrutinize results for optimizing performance.
- Prepare, check, release, and update production drawings (per engineering standards) to the manufacturers/suppliers.
- Provide support for production related issues.

#### References

#### **Available Upon Request**

#### RESUME

Eligibility: Individual with disabilities that want to be considered for Schedule A

### **Qualifications Summary**

- 1. Formal education in industrial, medical, and environmental microbiology/biotechnology
- 2. Research experience and mentor in medical, environmental, and anaerobic microbiology
- 3. Expertise in DNA-based molecular tools for characterization of strains and communities
- 4. University teaching of microbiology, mycology, virology, bioinformatics, biochemistry, and biotechnology (at associate, bachelor's, master's, and doctoral level)
- 5. Training of students in research and scientific dissemination (+300 presentations).
- 6. Grant writing, management, and reporting (~\$3.2M; i.e., NSF, USDA, NOAA, Ed)
- 7. Scientific dissemination: reports, proposals, posters, oral presentations, and manuscripts
- 8. International collaborations in research with universities in Italy, and Brazil.
- 9. Leader on professional organizations, such as American Society for Microbiology
- 10. Attendee to scientific forums, such as ISME Congress, Gordon Research Conferences
- 11. Community service at science museums and teachers training workshops

### Work Experience

Faculty in Microbiology/Biotechnology/Biochemistry [Full Professor] Universidad Ana G. Méndez [formerly Universidad del Turabo]

Department of Natural Sciences and Technology State Road 189 km 3.3, Gurabo, PR

### 9/2007 - 7/2022

Hours per week: 40

#### **Duties, Accomplishments and Related Skills:**

- Teaching, research, and grant writing in microbiology, bioinformatics, biochemistry and biotechnology; from associate to doctoral levels.
- Graduate advisor for master's and doctorate
- Expertise in cultivation, isolation and identification of microbes, bacteriology, virology, microscopic fungal identification, anaerobic microbiology, biodegradation/biochemical assays, DNA-based techniques, study of viruses, aseptic techniques, bioinformatics.
- Research and training grants awarded (~\$3.2M) from USDA, Ed, NOAA, NSF, and NIH at UPR-based network among others.
- Training of students in research and scientific dissemination (+300 presentations).
- Grants administration and reporting in compliance with local and federal norms.
- International collaboration with Italy, Canada, and Brasil.

#### Associate Dean, CEAT (industrial related operation)

**Universidad del Turabo •** School of Natural Sciences and Technology State Road 189 km 3.3, Gurabo, PR

## 9/2006 - 9/2007 Hours per week: 40

### **Duties, Accomplishments and Related Skills:**

- Academic and administrative operation of a novel industrial-related unit (CEAT: Center for Excellence in Advanced Technology), including implementation and creation of academic programas for workforce development.
- Collaboration with local Biopharmaceutical industry and government representatives to promote socioeconomic development by strategic academic programs.
- Recruitment and retention of students from the industry and underserved communities, including adults.
- The model was considered inefficient to the regional possibilities.

#### **Postdoctoral Research Associate**

# **Rutgers, The State University of New Jersey**

59 Dudley Road, New Brunswick, NJ

#### 7/2003 - 6/2005

Hours per week: 40

#### **Duties, Accomplishments and Related Skills:**

- Research related to microbial transformations of inorganic (arsenic) and organic pollutants (i.e., hydrocarbons) for bioremediation applications.
- Scientific dissemination; mentoring of junior staff

### **Academic Education & Honors:**

- PhD (October 2003), Rutgers, The State University of New Jersey, New Brunswick, NJ 08901. Major: Environmental Sciences (metagenomics on anaerobic environmental microbiology). Dissertation: "Molecular characterization of sulfidogenic communities in polluted and pristine environments based on the dissimilatory sulfite reductase genes (dsrAB)." Advisors: Drs. Lee J. Kerkhof and Lily Y. Young.
  - o **Honor:** US-EU Trans-Atlantic Environmental Biotechnology Fellowship (Feb-May 2002). Molecular Characterization of Sulfate-Reducing Bacteria under PCB Impact based on *dsrAB* genes. University of Bologna, Italy. **Host:** Dr. Fabio Fava
- MS (June 1996), University of Puerto Rico-Mayagüez, Mayagüez, PR 00681. Major: Biology (biotechnology and medical mycology). Thesis: "Ecological and Epidemiological Aspects of Cryptococcus neoformans in Puerto Rico" Advisors: Dr. Alejandro Ruiz Acevedo and Arturo Massol-Deyá.
- BS (June 1991), University of Puerto Rico-Mayagüez, Mayagüez, PR 00681. Major: Industrial Microbiology (biotechnology).

# **Awarded Grants** (partial list)

• RIG: Richness and Endemicity of Sulfate-reducing Bacteria in Neotropical Environments [PI; National Science Foundation; MCB-0615671; 2007-10; \$174,906]

- PRIMER-Tropical Bioprospecting Venture at CETA [PI; National Science Foundation; DUE-0903274; 2009-13; \$556,418]
- PRIMER Interconnections Shaping Life History Strategies [PI; US Department of Education-MSEIP; P120A160097; 2017-21; \$748,562]
- PRIMER Tropical Bioprospecting Venture for Agricultural Innovation [PI; US Department of Agriculture; 2015-38422-24076; 2015-21; \$263,000]
- RAPID: Microbial Diversity along an elevational gradient in El Yunque National Forest before and after Hurricane Maria [CoPI; National Science Foundation; DBI-2120367; 2021-23; \$79,000]

#### **Professional Publications**

- 1. Cantrell SA, M Molina, DJ Lodge, FJ Rivera-Figueroa, ML Ortiz-Hernández, AA Marchetti, MJ Cyterski, 2014. Effects of a simulated hurricane disturbance on forest floor microbial communities. Forest Ecology and Management 332, 22-31.
- 2. Cantrell SA, DJ Lodge, CA Cruz, LM García, M Molina. 2013. Differential abundance of microbial functional groups along the elevation gradient from the coast to the Luquillo Mountains. Ecological Bulletins, 87-100.
- 3. González G, FJ Rivera-Figueroa, W Gould, SA Cantrell, 2014. Microorganisms in small patterned ground features and adjacent vegetated soils along topographic and climatic gradients in the High Arctic, Canada. Open Journal of Soil Science. 4:47-55.
- 4. El Fantroussi S, SN Agathos, DH Pieper, R Witzig, B Cámara, L Gabriel-Jürgens, H Junca, G Zanaroli, F Fava, L Y Young, K Hamonts, R Lookman, M Maesen, L Diels, W Dejonghe, J Dijk, D SpringaeL. 2006. Chapter IV. Biological Assessment and Remediation of Contaminated Sediments. In: Assessment and Remediation of Contaminated Sediments; Springer Verlag, pp 179-241. [Book chapter]
- 5. Zanaroli, G, LY Young, L Marchetti, F Fava. 2006. Effects of exogenous co-planar polychlorinated biphenyls (PCBs) on the microbial reductive dechlorination of PCBs pre-existing in an anaerobic sediment of Venice Lagoon. Biodegradation. 17:19-27.
- 6. C DeFraia, LY Young. 2005. Arsenate Respiratory Reductase Gene (*arrA*) for Desulfosporosinus sp. strain Y5. Biochem Biophys Res Comm. 338:825-829.
- 7. Casillas-Martínez, L, ML González, Z Fuentes-Figueroa, CM Castro, D Nieves-Méndez, C Hernández, W Ramírez, RE Sytsma, production of a hypersaline microbial mat, Cabo Rojo, PR. Geomicrobiol J. 22:269–281.
- 8. LJ Kerkhof. 2005. Phylogeography of sulfate-reducing bacteria among disturbed sediments disclosed by the dissimilatory sulfite reductase genes (*dsrAB*). Appl Environ Microbiol. 71:1004-1011.
- 9. Fedi S, V Tremaroli, D Scala, F Fava, LY Young, D Zannoni. 2005. T-RFLP analysis of bacterial communities in cyclodextrins amended bioreactors developed for biodegradation of polychlorinated biphenyls (PCBs). Res Microbiol. 156:201-210.
- 10. 2003. Molecular characterization of sulfidogenic communities in polluted and pristine environments based on the dissimilatory sulfite reductase genes (*dsrAB*). PhD thesis [Dr Lee J Kerkhof, advisor].

- 11. Ly Young, LJ Kerkhof. 2001. Molecular characterization of sulfatereducing bacteria in anaerobic hydrocarbon-degrading consortia and pure cultures using the dissimilatory sulfite reductase (*dsrAB*) genes. FEMS Microbiol Ecology. 35:145-150.
- 12. \_\_\_\_\_\_. 1996. Ecological and Epidemiological Aspects of Cryptococcus neoformans in Puerto Rico. Master thesis [Dr Alejandro Ruiz Acevedo, advisor].

## **Presentations at Professional Forums** (partial list)

- 1. Ares Estrada JM, K Hernández, KM González-Rosario, Fundamental Kinetics for Bacterial Degradation of Phthalates among Diverse Isolates from Puerto Rico. ASM Microbe 2022. Washington DC. [Poster]
- 2. López F, KM González-Rosario, [rev]. 2022. Dynamic of Sulfate Reducing Bacteria in Response to Hurricane Maria along the Elevation Gradient al El Yunque Rain Forest in Puerto Rico. ASM Microbe 2022. Washington DC. [Poster]
- 3. Arroyo-Cruz LV, 2021. Genetic diversity of Mycoplasma species in dairy farms soil during three seasons in the northern area of Puerto Rico. XXIII Biennial Congress of the International Organization for Mycoplasmology 2021. Tel Aviv, Israel (virtual participation). [Poster]
- 4. Arroyo-Cruz LV, 2019. Genetic Diversity of Mycoplama Species in Dairy Farm Soils during Three Seasons in the Northern Area of Puerto Rico. ASM Microbe 2019. San Francisco, CA. [Poster]
- 5. Colón-Alicea J, 2019. Bacterial Prospects for Diisobutyl Phthalate Degradation from Coastal Lagoons in Puerto Rico. ASM Microbe 2019. San Francisco, CA. [Poster]
- 6. González-Rosario KM, SA Cantrell, 2019. Dynamics of micronbial groups in response to simulates hurricane at El Yunque Pain Forest in Puerto Rico. ASM Microbe 2019. San Francisco, CA. [Poster]
- 7. López-Carrasquillo J, 2019. Dynamic of soil Sulfidogens in the Hurrica Aftermath. ASM Microbe 2019. San Francisco, CA. [Poster]
- 8. González-Rosario KM, SA Cantrell, 2019. Dynamics of microbial groups in response to simulated hurricane at El Yunque Rain Forest in Puerto Rico. 86th Annual Meeting of the Mycological Society of America. Minneapolis, MN. [Poster]
- 9. Vega Santiago YM, S Nieves-Hernández, J Colón-Alicea, 2019. Isolation of Airborne Haloalkane-Degrading Fungi from Puerto Rico. 86th Annual Meeting of the Mycological Society of America. Minneapolis, MN. [Oral]
- 10. Acevedo-Alfaro JF, 2018. Biodegradation of BTEX by fungi isolated from the hypersaline lagoon Las Salinas, Punta Cuchara Natural Reserve, Ponce, Puerto Rico. XI International Mycological Congress. San Juan, PR. [Oral]
- 11. Cruz-Flores LI, B Sang-Laboy, J Colón-Alicea, **JR**. 2018. Bioprospecting for Chitinases among Bacteria in Puerto Rico. XI International Mycological Congress. San Juan, PR. [Poster]
- 12. del Valle Colón CD, RA Maíz-del Toro, SA Cantrell. 2018. Spatial distribution of leaf litter fungal communities in a simulated hurricane experiment. XI International Mycological Congress. San Juan, PR. [Oral]

- 13. González-Rosario KM, J López-Carrasquillo, SA Cantrell,
  Dynamics of microbial groups in response to simulated hurricane at El Yunque Rain Forest in
  Puerto Rico. XI International Mycological Congress. San Juan, PR. [Oral]
- López Rosario C, J Colón-Alicea, S Nieves, A Ríos-Ramos, C Baez-Félix,
   Novel Fungal and Bacteria Degradation of Bromoalkanes.
   Mycological Congress. San Juan, PR. [Poster]
- Sang-Laboy B, LI Cruz-Flores, J Colón-Alicea,
   Sang-Laboy B, Li Cruz-Flore
- 16. Serrano-Torres LE, Y Berner-Casillas, diversity at the Martin Peña Channel. XI International Mycological Congress. San Juan, PR.
- 17. Bernier-Casillas Y, KF Álamo-Rodríguez, 2016. Hexadecane-Degrading Bacteria: Inoculums For Efficient Soil Rhizoremediation. ASM Microbe 2016. Boston, MA.
- Bernier-Casillas Y, S Cantrell, 2015. Isolation and Characterization of HexadecaneDegrading Bacteria in the Martín Peña Canal in Puerto Rico. American Society for Microbiology General Meeting 2015. New Orleans, LO. [Poster]
- 19. Contreras-Medina LD, Sediment at the Jobos Bay National Estuarine Reserve, Puerto Rico. American Society for Microbiology General Meeting 2014. Boston, MA. [Poster]
- Bernier-Casillas Y, S Cantrell,
   Alkanes across Ecosystems in Puerto Rico.
   American Society for Microbiology General Meeting 2013.
   Denver, CO. [Poster]
- 21. García-Díaz J, Y Bernier-Casillas, 2013. Bioprospecting for Bioenergy: A DiscoveryBased Learning Approach. American Society for Microbiology General Meeting 2013. Denver, CO. [Poster]

- 24. Carazo-Carrión A, 2012. Structure of Ammonia-Oxidazing Archaea at El Yunque Rain Forest in Puerto Rico. American Society for Microbiology General Meeting 2012. San Francisco, CA. [Poster]
- Espada X, L Paiva Viégas, J Laffontaine, LM Garcia-Orta,
   Bacterial Endophytes for the Invasive Plant Spathodea campanulata in Puerto Rico. American Society for Microbiology General Meeting 2012. San Francisco, CA. [Poster]
- 26. Laureano-Córdova DL, Y Bernier-Casillas, Biogeography of Fungi across Tropical Coastal Habitats. American Society for Microbiology General Meeting 2012. San Francisco, CA. [Poster]
- 27. Laureano Córdova. 2012. Sulfidogenic Assemblages along Life Zones at El Yunque Rain Forest in Puerto Rico. EMBO Workshop on Microbial Sulfur Metabolism. Noordwijkerhout, The Netherlands. [Poster]
- 28. LV Arroyo-Cruz, VJ Cruz-Soto. 2011. Tropical Bioprospecting Venture for Training in Biotechnology. 111th American Society for Microbiology General Meeting. New Orleans, LA. [Poster]

<b>RESUME</b> •		, PhD
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- DL Laureano Córdova. 2011. Molecular biogeography of fungi across tropical coastal ecosystems. 79<sup>th</sup> Annual Meeting of the Mycological Society of America. Fairbanks AK. [Oral]
- Cantrell SA, Lodge DJ, with simulated cyclone disturbances. IX International Mycological Congress. Edinburgh, Scotland. [Poster]

### **Job Related Training**

- Explorations in Data Analyses for Metagenomic Advances in Microbial Ecology (EDAMAME) Workshop. Kellogg Biological Station, MI (July 10-20, 2016)
- Microbial Diversity. Marine Biological Laboratory; Woods Hole, Mass. June 1996.
- Recombinant DNA Technology Workshop: Isolation, Cloning and Characterization of DNA. UPR-Mayagüez. June 1995.
- Analysis and Genetic Manipulation of YACs (Yeast Artificial Chromosomes). Cold Spring Harbor Laboratory, New York. October 13-26, 1994.

Language Skills

Language	Spoken	Written	Read
Spanish	Advanced	Advanced	Advanced
Italian	Novice	Novice	Intermediate
Portuguese	Intermediate	Novice	Intermediate

#### **Affiliations**

- American Society for Microbiology Member and Delegate to the Committee on Microbial Sciences (COMS)
- Puerto Rico Society for Microbiologists Councilor to ASM (COMS member representing the branch)

#### References (professional):

- Dr. Roberto Lorán. Former Vice Chancellor and Full Professor (retired), Universidad del Turabo (now Universidad Ana G. Méndez-Gurabo Campus), Gurabo, PR. Phone: 787-510-5606. E-mail: roberto.loran@gmail.com
- Dr. Fred C. Schaffner Gibbs. Full Professor and former Associate Dean for Research and Graduate Studies (retired), School of Science and Technology, Universidad del Turabo (now Universidad Ana G. Méndez-Gurabo Campus), Gurabo, PR. Phone: (787) 644-1962. E-mail: fcspr@caribe.net
- Dr. Lily Y. Young. Distinguished Professor and Postdoctoral Advisor. Rutgers, The State University of New Jersey, New Brunswick, NJ. Phone: 848-932-6383. E-mail: lily.young@rutgers.edu

Announcement Number: CIN-ZX-ODH-2022-0017

Position Title: Life Scientist/General Engineer/Physical Scientist

Staging Area Number: SA-EPA-0001

Name:

MIDX: 002733834

United States Citizen: Y Veterans' Preference: NV

Military Service Dates (Start of Service - End of Service):

Location(s) Applied to: Lacey, WA(US); Portland, OR(US)

Series Applied To: 0401, 1301

#### Resume

Country of Citizenship: United States

Highest Grade: 11

Availability: Job Type: Permanent

Detail

Multiple Appointment Types

Telework

Work Schedule: Full-time

Work Experience: Department of Interior, U.S. Geological Survey

10/2003 - Present 2130 SW 5th Ave

Portland, OR 97201 US Hours per week: 40

Series: 1316 Pay Plan: GS Grade: 11

Supervisor: Micelis Doyle (503-251-3226) Okay to contact this Supervisor: Yes

#### Hydrologic Technician

Primary technician for Source Water Protection and Harmful Algal Bloom (HABS) projects since 2018. Sole employee responsible for installing, and operating complex water-quality equipment and correcting and reporting the data for this project. Trained others to perform these duties. One of three employees collecting and processing water-quality samples using parts-per-million and parts-per-billion sampling techniques for the National Water-Quality Network (NWQN), since 2011. From 2011 to 2020, two weeks per year, performed habitat assessment, collected algae, insect, and fish samples and was one of two fish taxonomists for the office. Sole employee responsible for data entry into the national biological database. Team member harvesting fishes to determine the bioaccumulation of toxic chemicals (PFAS), identifying fishes while sampling from a boat in the Columbia River Slough, one week per year, 2019 and 2020. Team member on three Regional Stream-Quality Assessments in the Pacific Northwest (2015), Northeast U.S. (2016), and northern California (2017), for two weeks each. Lead fish taxonomist during the Pacific Northwest

assessment, identifying fish species, collecting DNA samples, and recording life history data. Collected and trained approximately 10 others to collect water-quality samples at more than 50 sites over six weeks, during the Pacific Northwest Regional Assessment. Project Chief of the North Santiam Chlorophyll Study (2011-2015), producing yearly budgets, consulting and meeting with funding partners, operating water-quality monitors at four sites, and analyzing and reporting data. One of two team members on the Lower Columbia River Ecosystems Monitoring Program from 2010 to 2014, collecting and processing algae and phytoplankton samples for chlorophyll and stable isotope analysis, collecting and processing water samples for nutrient and chemical contaminants, and performing nutrient, stable and radioactive isotope uptake experiments to determine algae growth requirements and growth rates. Operated four water-quality monitors at project sites and processed and reviewed data from those monitors. Consulted and met with project partners individually or as part of a group. Primary technician on the North Santiam Turbidity Study from 2003-2011. Operated up to 13 water-quality monitoring sites, analyzing data, reporting data, collecting suspended-sediment samples, and trained at least 10 others to perform these tasks. My major accomplishments include earning 'Superior' or 'Exceptional' performance evaluations for all years since 2004. I began my career with the USGS as a GS-6 and have been promoted to a GS-11, receiving several within-grade increases based on my performance.

Department of Interior, U.S. Geological Survey

07/2021 - 10/2021 2130 SW 5th Ave Portland, OR 97201 US

Hours per week: 40 Series: 1316

Pay Plan: GS Grade: 11

Supervisor: Micelis Doyle (503-251-3226) Okay to contact this Supervisor: Yes

#### Acting Supervisory Technician

Supervised technical and administrative activities of ten Studies Section Technicians by maintaining work plans, establishing standards, and prioritizing duties. Identified and resolved personnel conflicts, directed, and ensured the accuracy of employee time and budgetary expenditures during the end of the fiscal year closeout, and authorized purchases up to \$3000. Directed the collection, analysis, interpretation, review, and presentation of collected data and acted as technical authority for processing and disseminating water-quality and hydrologic data by utilizing knowledge of chemical and biological processes that affect the data to determine quality of the data. Previous monitoring and sampling duties were maintained in addition to supervising, while also conducting meetings with employees, and attending meetings with project partners, other supervisors, and the Center's Associate Director and Director to determine near-term and future needs and direction of the Science Center.

Department of Interior, U.S. Geological Survey

08/2018 - 12/2018 2130 SW 5th Ave

Portland, OR 97201 US Hours per week: 40

Series: 1316
Pay Plan: GS
Grade: 12

This a time-limited appointment or temporary promotion

Supervisor: Micelis Doyle (503-251-3226) Okay to contact this Supervisor: Yes

Supervisory Technician

Supervised technical and administrative activities of seven Studies Section Technicians by maintaining work plans, establishing standards, and prioritizing duties. Identified and resolved personnel conflicts, directed, and ensured the accuracy of employee time and budgetary expenditures during the end of the fiscal year closeout, and authorized purchases up to \$3000. Directed the collection, analysis, interpretation, review, and presentation of collected data and acted as technical authority for processing and disseminating water-quality and hydrologic data by utilizing knowledge of chemical and biological processes that affect the data to determine quality of the data. Previous monitoring and sampling duties were maintained in addition to supervising, while also conducting meetings with employees, and attending meetings with project partners, other supervisors, and the Center's Associate Director and Director to determine near-term and future needs and direction of the Science Center.

Department of Interior, U.S. Geological Survey

01/2003 - 10/2003 2795 Anderson Ave

Suite 106

Hours per week: 40

Series: 0482 Pay Plan: GS Grade: 05

This a time-limited appointment or temporary promotion

Supervisor: Rip Shively (573-876-1900) Okay to contact this Supervisor: Yes

Klamath Falls, OR 97603-9572 US

#### Fisheries Biologist

Worked on several teams at multiple locations netting endangered and threatened fishes from watercraft and while wading at night and in freezing conditions. Recorded biometric data and tagged fish, entering field-collected data into Microsoft Access database, and performing quality control checks on data entered by others. Calibrated and maintained 14 water-quality monitors collecting water chemistry data and collected water-quality samples.

Department of Agriculture, U.S. Forest Service

07/2002 - 12/2002 3200 SW Jefferson Way Corvallis, OR 97331 US Hours per week: 40

Series: 0404 Pay Plan: GS Grade: 05

This a time-limited appointment or temporary promotion

Supervisor: Chris Moyer (541-760-1372) Okay to contact this Supervisor: Yes

#### Biological Sciences Technician

Led team of three to five peers collecting biological, and habitat data to determine the effectiveness of riparian protection mandates by cataloging baseline and impacted environmental and biological conditions in remote and semi-impacted streams and rivers on public land for the Aquatic Riparian Effectiveness Monitoring Program (AREMP). Biological sampling utilized backpack electric fishing equipment and dipnets; Habitat sampling utilized electronic rangefinder with incorporated compass and electronic logging system, tape measures, staffs, and water velocity meters. Oversaw daily operations and schedules of the crew determining tasks, logistics and record keeping of timesheets, vehicle logs, and collected data. Trained personnel to use complex electronic surveying equipment, maintained, and troubleshot malfunctions of the equipment while in the field with little to no outside support, often while conducting surveys in remote hike-in locations. Entered

field-collected data into Microsoft Access database and performed quality control checks on data entered by others.

Education: Idaho State University

Pocatello, ID US

- 12/2001

73

Major: Ecology

Relevant Coursework, Licensures and Certifications:

General Zoology with Laboratory, Physical Geology with Laboratory, Ecology Seminar, Principles of Animal Physiology, Ecotopics: Ecological Scale, Ecology of Water Pollution, Organic Evolution, Plant Physiology, Ichthyology, Population Ecology, Introduction to Biometry, Conservation of Natural Resources, Field Ecology, Physiological Ecology, Freshwater Ecology.

Raritan Valley Community College Branchburg, NJ US - 05/1999 78

Major: Environmental Sciences

Relevant Coursework, Licensures and Certifications:

General Biology I and II, Principles of Microbiology, General Ecology, General Chemistry I and II, Organic Chemistry I and II, Issues in Environmental Sciences, Environmental Field Studies.

Delaware Valley Regional High School Frenchtown, NJ US - 06/1995 Relevant Coursework, Licensures and Certifications: High School

Job Related Training: Water Quality Instrumentation: Operation, Calibration, and Maintenance, October 24, 2019. Lamprey Ecology and Management (Portland State University EPP521), May 31, 2019. HAZWOPPER 8-Hour Annual Refresher, July 3, 2019. USGS Leadership Intensive, March 14, 2019. Are You Ready to be a Supervisor, October 16, 2018. Red Cross First Aid and CPR, July 27, 2018 24-Hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Course, July 19, 2018. Department of the Interior Motorboat Operator Refresher, June 16, 2017. Introduction to Electrofishing (Smith-Root), May 3, 2017. Field Methods for the Collection of Sediment and Water-Quality with Large Samplers from Boats on Large Rivers, March 3, 2016. National Water-Quality Assessment (NAWQA) Ecological Field Methods, April 30, 2015. Field Water-Quality Methods for Ground Water and Surface Water, August 2, 2013. US FWS Electrofishing Safety, July 29, 2011

Professional Publications: Mangano, J.F., Piatt, D.R., Jones, K.L, and Rounds, S.A., 2018, Water temperature in tributaries, off-channel features, and main channel of the lower Willamette River, northwestern Oregon, summers 2016 and 2017: U.S. Geological Survey Open-File Report 2018-1184, 33 p., https://doi.org/10.3133/ofr20181184. Piatt, D. R., Johnston, M. W., Bragg, H. M., Brooks, A. M., Sobieszczyk, S., and Uhrich, M. A., 2011, Water-quality in the North Santiam River Basin, Oregon - Comparison of water-quality data for water year 2007 with the preceding period of record: U.S. Geological Survey Open-File Report 2011-1008, 75 p., https://doi.org/10.3133/ofr20111008. Sobieszczyk, S., Uhrich, M. A., Piatt, D. R., and Bragg, H. M., 2008, Analysis of Geomorphic and Hydrologic Characteristics of Mount Jefferson Debris Flow, Oregon, November 6, 2006: U.S. Geological Survey Scientific Investigations Report 2008-5204, 19 p., https://doi.org/10.3133/sir20085204. Bragg, H. M., Sobieszczyk, S., Uhrich, M. A., and

Piatt, D. R., 2007, Suspended-Sediment Loads and Yields in the North Santiam River Basin,

Oregon, Water Years 1999-2004: U.S. Geological Survey Scientific Investigations Report 2007-5187, 27 p., https://doi.org/10.3133/sir20075187.

References: Jennifer Morace U.S. Geological Survey

Hydrologist

Phone Number: 503-251-3229 Email Address: jlmorace@usgs.gov Reference Type: Professional

Ian Waite

U.S. Geological Survey Research Biologist

Phone Number: 503-251-3463 Email Address: iwaite@usgs.gov Reference Type: Professional

Nora Herrera

U.S. Geological Survey

Hydrologist

Phone Number: 503-251-3209 Email Address: nherrera@usgs.gov Reference Type: Professional

Sean Payne

U.S. Geological Survey

Hydrologist

Phone Number: 503-251-3283 Email Address: spayne@usgs.gov Reference Type: Professional

Chauncey Anderson
U.S. Geological Survey

Team Lead-Hydrologist

Phone Number: 503-251-3206

Email Address: chauncey@usgs.gov Reference Type: Professional

#### Qualifications

- Robust oral and written communication skills. Multiple oral presentations at scientific conferences. 1 published scientific article with 2 in progress. 3 successful fellowship applications
- Proven experience collaborating and communicating with a wide range of audiences
- Experience with monitoring, characterization, and measurement of a contaminated peatland
- Strong statistical analysis skills
- Experience analyzing and summarizing elemental cycling (ex: mercury, sulfur, iron) in complex environmental systems
- Knowledgeable on processes that affect the behavior and fate of anthropogenic organic contaminants in aquatic and terrestrial environments
- Skill with groundwater sampling and chemical analysis. Informed on other hydrological monitoring techniques and methods.
- · Works independently to manage daily priorities in a fast-paced environment
- · Outstanding organizational ability and excellent attention to detail

#### Education

Doctor of Philosophy, Soil Science University of Minnesota Land and Atmospheric Science Program Expected graduation May 2023

Bachelor of Science, Chemistry Minor: Environmental Science American Chemical Society Certified University of Portland, 2010

GPA: 3.96 GPA: 3.88, Magna Cum Laude

Experience:

University of Minnesota - Saint Paul, Minnesota

Ph.D. Candidate, 40 hours/week

August 2017 - present

Dissertation topic: Effects of increasing temperature and elevated carbon dioxide on mercury concentrations in boreal peatlands. Collected environmental soil and water samples, performed quantitative analysis of total mercury, methylmercury, reduced iron, and oxidized iron concentrations, performed statistical analysis of data, composed scientific summary of results, worked with multiple collaborators across academic organizations and federal agencies.

Teaching Assistant, 20 hours/week

Classes: "Basic Soil Science", "Wetlands", "Issues in the Environment"

Graded all assignments, essays, midterms and facilitated logistics of classroom

(assigning groups, responding to student absences, recording attendance, etc.)

Genentech Inc. - Hillsboro, OR Quality Assurance Specialist I, 40 hours/week

August 2014 - July 2017

Provided quality oversight to aseptic manufacturing operations and maintenance operations at a commercial biologic drug manufacturing facility; investigated cause, impact, and corrective action for discrepant events at local/global sites; improved shipping process of tanks to reduce discrepant events; served as Team Lead during regulatory inspections, responsible for training peers, assigning/distributing work to peers.

Sr. Quality Control Analyst, 40-60 hours/week September 2010 – August 2014 Performed testing and review of biological and chemical testing of samples; executed/reviewed environmental monitoring of pharmaceutical classified areas; revised/created procedures; led team meetings and coordinated activities at cross-functional meetings; traveled to supplier's facility to perform inspections in support of new product launches.

Quality Control Co-Op, 20 hours/week January 2010 – September 2010 Performed growth promotion and lot release of incoming media, prepared reagents, maintained equipment.

#### Service

<u>Service</u>	
Friends of the Mississippi River Environmental Stewardship Institute	
Mentored one high school student with goal of completing enviror	nmental
capstone project for the summer program.	Summer 2021
University of Minnesota – Saint Paul, MN	
Department of Soil, Water, and Climate; Committee on Diversity 8	k Inclusion
Co-Chair and Graduate Student Representative	2020-2021
College of Food, Agriculture, and Natural Sciences (CFANS); Comr	nittee on
Diversity & Inclusion	
Graduate Student Representative	2020-2021
CFANS Graduate Student Body	
Land and Atmospheric Science (LAAS) Representative -	2019-2021
Executive Board Treasurer -	2019-2021
Grants Committee -	2019-2021
Alternate LAAS Representative -	2018-2019
LAAS Graduate Student Body	
President-	2019-2020
Vice President -	2018-2019

#### <u>Awards</u>

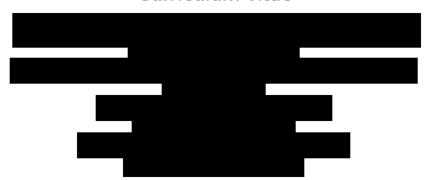
University of Minnesota	
Doctoral Dissertation Fellowship	2022-present
National Science Foundation	
Graduate Research Fellowship (NSF GRFP)	2019-2022
16% awarded out of $\sim$ 12,200 applicants	
University of Minnesota	
Graduate School - Research Fellowship	2017
University of Portland	
William and Lavina Wilson Award for outstanding academic merit	2009

American Chemical Society (ACS)	
96th percentile nationally on the standardized organic chemistry exam	2008
91st percentile nationally on the standardized analytical chemistry exam	2008
University of Portland	
Freshman Chemistry Student of the Year	2007

# **Highlighted Graduate Courses**

Organic Pollutants in Environmental Systems, Hydrology and Watershed Management, Statistics for Natural Resource Professionals, Soil Chemistry and Minerology, GIS for Natural Resources

#### Curriculum vitae



#### SYNOPSIS:

- Expertise in conducting ecosystem level studies in corn, cotton, rice and soybean by monitoring CO2, H2O and methane fluxes and estimated evapotranspiration demand and crop coefficients to help in irrigation scheduling
- Experience in watershed management, phytoremediation, water quality assessment and water use monitoring
- Senior scientist with leadership role in developing a sustainable sweet sorghum-based ethanol value chain in multiple countries involving industrial partners with biotic and abiotic stress tolerant productive varieties and hybrids with system biology approach
- Delineated possible anti-colon cancer mechanism of sorghum extracts and identified individual bioactive compounds and quantified the anticancer compounds in several muscadine grapes
- Conceptualized and demonstrated the efficacy of several agronomic and agro-ecological sustainable crop intensification strategies in collaboration with growers in lower Mississippi Delta, including seed nutrition in corn, soybean and cotton, residue quality of soybean for livestock feeding and lint quality in cotton
- Extensive research experience elucidating genetics of bacterial leaf blight resistance genes Xa21, xa13 and xa5 in rice and marker assisted selection through backcross breeding for gene pyramiding besides functional validation using real-time PCR approach
- · Significant non-traditional instructing and traditional teaching experience
- Extensive oral communication of scientific results both domestically and internationally
- Conducted independent and multi-disciplinary team-based collaborative research with many universities and industries and published 68 peerreviewed articles, some of which in high-impact journals including Advances in agronomy, Plant and soil, Critical reviews in food and nutrition, Agronomy J, Tropical plant biology, Agricultural water management, Crop science, Climatic change, Biotechnology J, Plants,

- Expertise: Genetics, row crop agronomy, cropping systems, cover cropping, crop physiology, ecology, environmental sciences, phytoremediation, precision agriculture, water management, irrigation scheduling, eddy covariance, energy balance, conservation agriculture, nutrition, and system biology
- Grant review, management-US-AID, USDA-NIFA, US-DoE, European commission etc.

#### **EDUCATION:**

**Postdoctoral Fellow** 2005-2008, Centre for Cellular and Molecular Biology (CCMB), India

- **Ph. D.** (1998) Indian Agricultural Research Institute (IARI), New Delhi, India Specialization: Genetics
  Dissertation: "Investigations on drought tolerance in maize, A genetic and biochemical appraisal"
- **M. S.** (1995) Acharya NG Ranga Agricultural University (ANGRAU), Hyderabad, India Specialization: Genetics and Plant Breeding Dissertation: "Development of iso-cytoplasmic restorer lines in rice-a study in F3 populations"
- **B. S.** (1993) Acharya NG Ranga Agricultural University (ANGRAU), Hyderabad, India. Specialization: Agriculture

#### **RESEARCH EXPERIENCE**

Crop Production Systems Research Unit USDA-ARS: Research Agronomist (2018 May-present) Hours per week:40. My research is aimed at developing agronomic and agro-ecological strategies for sustainable intensification of corn, cotton, soybean and rice in Mississippi Delta with an emphasis on water use efficiency, water quality, nutrient leaching, soil amendments, cover cropping, soil health, soil microbiome, ecosystem fluxes and productivity. Quantified irrigation impacts on seed nutrition, lint quality and residue quality. I worked very closely with the growers and established several state-of-the-art eddy covariance systems to collect ecosystem fluxes (CO2, H2O and methane) for estimating evapotranspiration coefficients and assessing ecosystem productivity. Assessed the impact of alternate wetting drying method in rice ecosystem and demonstrated reduction in methane emissions. Managed a grant funded by Mississippi Soybean Promotion Board Supervisor: Dr. Krishna Reddy. Phone: 662-686-5272, Email: krishna.reddy@usda.gov

Center for Viticulture and Small Fruit Research Florida A&M University, Research Scientist (2017 September-2018 April) Hours per week:40. Characterized several muscadine grape cultivars for anti-

cancer compounds using high performance liquid chromatography (HPLC) and cell culture assays

Supervisor: Dr. Mehboob Sheikh. Phone: 850-412-5189, Email:

mehboob.sheikh@famu.edu

# Sugar Research Station, Louisiana State University, Baton Rouge, Research Scientist (2017 March-2017 September) Hours per week:40.

Characterized several energy cane clones for biomass production, ratoonability, cell wall structural components using HPLC for advanced biofuel production

Supervisor: Dr. Collins Kimbeng. Phone: 225-642-0224, Email: ckimbeng@agcenter.lsu.edu

# Department of Microbiology, University of Florida, Gainesville Postdoctoral Fellow (2015 October-2017 February) Hours per

week:40. My responsibilities included breeding sweet sorghum, introgression of low lignin conferring brown midrib (*bmr*) genes into elite sweet sorghum lines using marker assisted back crossing, bioinformatics, maintaining crossing block and advancing generations apart from cloning anthracnose tolerant genes using virus induced gene silencing approach. Supervisor: Dr. Wilfred Vermerris. Phone: 352-273-8162, Email: wev@ufl.edu

# International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India

Senior Scientist (2008 April-2015 August) Hours per week:40 Led bioenergy sorghum and sweet sorghum breeding program for genetic enhancement for agronomic traits, biotic and abiotic stresses in developing sustainable value chain model in collaboration with stakeholders in India. Philippines, Brazil, Mexico, Uzbekistan. Developed functional SSR markers and CRISPR-Cas9 markers for brown midrib genes introgression in sorghum for enhanced digestibility and biofuels production. Conducted extensive studies on post-harvest storage of sweet sorghum stalks and sugarbeet roots for biofuel production. Phytoremediation of toxic metals and biological nitrification inhibition (Nitrous oxide). Life cycle analysis of sweet sorghum/ biomass sorghum ethanol value chain. Watershed planning and management. Adoption and behavioral surveys. Lead as principal investigator in several international research and developmental projects funded by USDA-NIFA, USAID, FAO, IFAD, European commission, CFC, IDB and Govt of India. Provided programmatic leadership to external and internal stakeholders

#### **GRANT REVIEW MANAGEMENT:**

Funding source	Project title	PI or Co-PI	Budget (US-\$)	Duratio n
Ministry of New and Renewable Energy (MNRE), Govt. of India	Developing an atlas of high biomass sorghums amenable for lingo-cellulosic ethanol production in India	PI	60,000 out of 96,000	2010- 2012
Gesellschaft für Internationale Zusammenarb eit (GIZ), Germany	Intercropping of banana and sweet sorghum in marginal lands of Gujarat, India to demonstrate socio-economic and environmental benefits	PI	40,000 out of 80,000	2013- 2015
USAID-CGIAR- US varsity linkage grant (ICRISAT-KSU)	Production of advanced biofuels from salinity tolerant brown midrib (bmr) sorghums	PI	15,000 out of 60,000	2013- 2015
Department of Science and Technology (DST), Govt of India	Characterization of novel brown midrib (bmr) sorghum mutants and improving the conversion efficiency for higher biofuels and bioproducts recovery	PI	26,000	2013- 2015
DBT, Govt of India	Commercialization sweet sorghum as a complimentary feedstock for sugarmills in Tamilnadu, Maharashtra and Gujarat	PI	175,000 out of 290,000	2015- 2017
European Commission (EC)	Sweet sorghum: An alternative energy crop (SWEETFUEL)  http://www.sweetfuel-project.eu/	Co-PI and workpackage lead for drought tolerant cultivar development	478, 000 out of 3.52 millions	2009- 2013
Intl. Fund for Ag. Develop. (IFAD)	Linking the poor to global markets: Pro-poor development of biofuel Supply chains	Co-PI and Sweet sorghum coordinator	940,000 out of 2.5 millions	2008- 2011
Organization of the Petroleum Exporting	Sorghum and pearl millet for enhanced crop-livestock productivity in saline lands Sorghum and pearl millet for enhanced crop-livestock	Co-PI	70,000 out of 520,000	2008- 2011

Countries (OPEC <b>)</b>	productivity in saline lands (Countries: UAE, Jordan, Syria, Yemen, Algeria and Egypt)			
Indian Council of agriculture Research (ICAR)- National Ag. Innovation program (NAIP)	Value chain model for bioethanol production from sweet sorghum in rainfed areas through collective action and partnership.	Co-PI	550,000 out of 1.6 million	
Islamic Development Bank (IDB)	Sorghum and pearl millet for crop diversification, improved crop-livestock productivity and farmer livelihoods in Central Asia	Co-PI	85,000 out of 500,000	2012- 2014
Common Fund for Commodities -Food and Agriculture Organization (CFC-FAO)	Enhancing livelihood opportunities of smallholders in Asia: Linking smallholder sweet sorghum farmers to the bioethanol industry	Co-PI	650,000 out of 1,013,610	2009- 2013
Indo-U.S. Science and Technology Forum and US-Dept. of Energy (IUSSTF-US DoE)	Development of sustainable advanced lignocellulosic biofuel systems http://biofuels.ifas.ufl.edu/.	Co-PI and work package I lead	550,000 out of 12.5 millions	2012- 2017
Department of Biotechnology (DBT), Govt of India	Development of low-lignin high-biomass sorghums suitable for biofuel production	Co-PI	40,000 out of 72,000	2012- 2015
USDA-NIFA	Evaluation and mitigation of anthracnose disease pressure due to the introduction of sorghum for feedstock production.	Co-PI	40,000 out of 450,000	2012- 2016
Mississippi Soybean	Development and Dissemination of an Irrigation	Co-PI	15000	2019

Promotion	Schedule on Smartphones for		
Board	Soybean		

#### **TEACHING EXPEREINCE**

Crop Production Systems Research Unit USDA-ARS (2018-present) Mentored 12 undergrad and high school students in field experimentation, data collection and use of equipment like ceptometer, porometer, chlorophyll meter, plot thresher, spectral reflectance sensors, moisture sensors, EM50 data loggers, hydraulic conductivity meters. Organized a demo for CPSRU staff on use of LI 6800 portable photosynthesis system

**Department of microbiology, University of Florida Postdoctoral Fellow (2015-2017)** Mentored 4 graduate students in field experimentation, data collection, maintaining crossing block, pollinations and harvesting and threshing

# International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India

**Senior Scientist (2008-2015)** Guided 10 Masters students in biology, agriculture, biotechnology, genetics, molecular biology, physiology for their dissertation. Taught "Floral biology and seed development" (2+1) course for masters students at ANGRAU, India.

#### AWARDS and FELLOWSHIPS

- Distinguished Researcher Award (2011) from Pampanga Agricultural University, Philippines
- Fellow of Association of Biotechnology and Pharmacy, 2014
- Outstanding Researcher award (2013) from the Director General, ICRISAT
- Member, International Advisory Committee member (2013-2016) in Biofuelnet Canada
- Member of the expert committee on lignocellulosic biofuels, Ministry of New and Renewable Energy, Govt. of India (2011-15).
- Editorial Manager for the International Journal of Sugar Technology.
- Editorial board member in J of Rangeland Science (2010-2012)
- Department of Biotechnology, Govt of India Postdoctoral fellowship (2005-2008)
- Council of Scientific and Industrial Research- Senior Research Fellowship (1995-1998)
- National Merit Scholarship (1987-1989)
- Guest Editor for a special issue of Sugar Technology on sweet sorghum utilization

 My PhD student was awarded- first time PI award (2013) from the Director General, ICRISAT

#### **CONFERENCES AND INVITED PRESENTATIONS (short listed)**

- Impacts of irrigation management on soybean (Glycine max L.,) residue quality in the Mississippi Delta. 2021 ASA Southern Regional Branch Meeting (virtual) Jan 30-31, 2021
- Effect of planting geometry and irrigation on soybean productivity in MS Delta in American Society of Agronomy annual conference Nov 10-13, 2019 San Antonio TX
- Breeding sorghum for biofuels and bioproducts. February 12, 2016.
   FCRC, University of Florida, Gainesville, FL, USA
- Sorghum as first and second generation biofuels feedstock ICRISAT.
   July 30, 2015 Kansas State University, Manhattan, KS, USA
- Sweet sorghum commercialization in sugarmills- a demonstration. 22 European Biomass Conference and Exhibition, June 23-26 2014, Hamburg, Germany
- Development of drought tolerant sweet sorghum. 21 European Biomass Conference and Exhibition, June 3-7, 2013, Copenhagen, Denmark
- Challenges of breeding sorghum for lingo-cellulosic biofuels production.
   January 30, 2014 University of Missouri, Columbia, MO, USA
- Improvement of sweet sorghum for drought tolerance. Sweet Sorghum Ethanol Association Annual Conference. January 23-24, 2014 Orlando, FL, USA
- Challenges of breeding sorghum for biotic and abiotic stresses. July 24, 2013 Texas A&M University, College station, TX, USA
- Advances in sweet sorghum cultivar development. July18, 2013 Penn State University, PA, USA
- Commercialization of sweet sorghum in India. Sweet Sorghum Ethanol Association Annual Conference, January 24-25, 2013 Orlando, FL, USA
- Commercialization of sweet sorghum cultivation in Asia. IV International congress on phytogenetics. September 24-28, 2012 UANL, Monterey, Mexico
- Current status and challenges of sorghum based biorefineries. Dupont Knowledge Center, 22 June 2012, Hyderabad, India
- Dynamics of sugar yield in relation to different phenological stages of sweet sorghum. Bioenergy and biorefinery conference-Southeast Asia. March 23-25, 2011 Singapore
- Role of ICRISAT in SWEETFUEL project and the results achieved so far.
   EU-India S&T cooperation days November 4-6, 2009 New Delhi, India.

#### **VOLUNTARY WORK:**

 Volunteered as a judge in regional lower science fair at Delta State University Cleveland MS during 2018-20

- Volunteered as a judge for poster and oral presentations American Society of Agronomy-Southern Chapter conference 2020-2021
- Volunteered as a judge for poster and oral presentations American Society of Agronomy-Annual conference 2019
- Contributed as a Lecturer in Greenville Renaissance Scholars summer educational program 2019-2020
- Cleaned up beaches in Florida as a member of UF-Agronomy Club.

#### **MEMBERSHIP TO PROFESSIONAL SOCIETIES**

- American Society of Agronomy
- American Society of Crop Science
- International Society for Sugar Research and Promotion
- Indian Society of Genetics and Plant Breeding

### **PhD ABSTRACT:**

The breeding materials generated from 8 x 8 diallel cross involving relatively drought tolerant and susceptible inbreds of maize were evaluated under irrigated, semi-irrigated and rainfed conditions in New Delhi, India during 1996-1998. Significant differences for general combining ability (GCA) and (SCA) effects for thirteen characters were observed in analysis of variance. The parents Ib3 and Ib8 were found to be having negative GCA effect for days to 50% silking and anthesis silking interval (ASI). While, for relative water content, plant height, ear length ear diameter, number of ears per plant, number of kernels per row, 100-grain weight and grain yield per plant exhibited positive GCA effects. The genotype x environment interactions revealed the presence of both GCA x environment and SCA x environment for majority of the agronomic traits. The crosses Ib7 x Ib8, Ib3 x Ib8 and Ib3 x Ib7 showed negative SCA effects for days to 50% silking and ASI while heterobeltiosis was observed for grain yield. These cross combinations had significantly positive SCA effects for grain yield and yield components and suggested for further evaluation under moisture stress conditions in diverse agro-climates. The laboratory screening of prenatal inbreds and crosses in 0.5 MPa polyethylene glycol as an osmoticum revealed differential accumulation of proline and abscisic acid when quantified using high performance liquid chromatography. Two crosses namely lb3 x lb7 and lb7 x Ib8 exhibited positive SCA effects for germination %, root length, shoot length, plant height stress index and dry matter stress index. Selection must be done simultaneously in stress as well as in non-stress environments duly giving proper weightage to all the morpho-physiological traits and yield attributes, as the chances of getting common progeny in stress as well as in non-stress environments are considerably low.

## **PUBLICATIONS: (Google Scholar citations:1811)**

- 1. Partson M., Anapalli, S.S and Reddy, K.N. (2022) Cereal rye cover crop impacts on soybean (*Glycine max* L.) root growth and soil properties (Accepted in Frontiers in Soil Science and Management)
- 2. Anapalli, S.S. Molin, W. and Reddy, K.N. (2022) Effect of rye cover crop on weed control, soybean yield and profitability (Submitted to Frontiers in Agronomy)
- 3. Anapalli, S.S. and Reddy, K.N. (2022) Photosynthetic response of soybean and cotton to different irrigation regimes and planting geometries (Submitted to Frontiers in Plant Sciences)
- 4. Anapalli, S.S. and Reddy, K.N. (2022) Assessing water use efficiency and on-farm profitability of corn production in response to irrigations and planting patterns in humid climates (Submitted to Agronomy J)
- 5. Saseendran, S.S, Edward J., Reddy K.N. and Singh G. (2022) Eddy covariance quantification of corn (*Zea mays* L.) water use and yield responses to irrigations on farm-scale fields. Agronomy J <a href="https://doi.org/10.1002/agj2.21130">https://doi.org/10.1002/agj2.21130</a>
- 6. (2022) Assessment of genotypic and phenotypic diversity in elite temperate and tropical sweet sorghum cultivars. Sugar Tech. <a href="https://doi.org/10.1007/s12355-022-01117-3">https://doi.org/10.1007/s12355-022-01117-3</a>
- 7. Saseendran, S.S, Reddy K.N, Sui R. and Singh G. (2022) Investigating soybean (*Glycine max* L.) responses to irrigation on a large-scale farm in the humid climate of the Mississippi Delta region. Agricultural Water Management <a href="https://doi.org/10.1016/j.agwat.2021.107432">https://doi.org/10.1016/j.agwat.2021.107432</a>
- 8. Quintana-Ashwell, N.E., Anapalli, S.S., Reddy, K.N.; Fisher, D.K. (2021) Profitability of twin-row planting and skip-row irrigation in a humid climate. Agronomy Journal 16 Pp. https://doi.org/10.1002/agj2.20847
- 9. and Anapalli, S.S (2021) Assessing the effects of agronomic management practices on soybean (*Glycine max* L.,) residue quality in the lower Mississippi Delta Plants **2021**, *10*(7), 1337; <a href="https://doi.org/10.3390/plants10071337">https://doi.org/10.3390/plants10071337</a>
- 10. Anapalli, S.S., Fisher, D.K. and Reddy, K.N. (2021) Water use efficiencies of different maturity group soybean cultivars in the humid Mississippi Delta. Water 2021, 13, 1496. https://doi.org/10.3390/w13111496

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- 12. Anapalli, S.S., Bellaloui, N. and Reddy, K.N., (2021). Effects of irrigation and planting geometry on soybean (*glycine max* I.) seed nutrition in humid climates. *International Journal of Agronomy*. https://doi.org/10.1155/2021/6625919
- 13. Anapalli, S.S., Sui, R., Bellaloui, N. and Reddy, K.N. (2021). Effects of irrigation and planting geometry on cotton (*Gossypium hirsutum* L.) fiber quality and seed composition. J Cotton Res 4, 2 (2021). https://doi.org/10.1186/s42397-020-00078-w
- 14. Gaffoor, I., Sandoya, G.V., Xavier, K.V., Nuckles, E.M., Vaillancourt, L.J. and Chopra, S. (2021) Performance of novel sorghum germplasm in Pennsylvania and their response to anthracnose. Crop Science. https://doi.org/10.1002/csc2.20486
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- 16. Gopalakrishnan, S., Srinivas, V., Kumar, A.A., Umakanth, A.V., Addepally, U. and Bagasse and its Impact on Plant Growth Promotion. Sugar Tech, 22(1), pp.143-156 <a href="https://doi.org/10.1007/s12355-019-00747-4">https://doi.org/10.1007/s12355-019-00747-4</a>
- 17. Anapalli, S.S., Reddy, K.N., Fisher, D.K. and Quintana-Ashwell, N.E., (2020). Assessing irrigation water use efficiency and economy of twin-row soybean in the Mississippi Delta. Agronomy Journal, 112(5), pp.4219-4231.
- 18. Anapalli, S.S., Fisher, D.K. and Reddy, K.N., (2020). Irrigation and planting geometry effects on cotton (*Gossypium hirsutum* L.) yield and water use. *J Cotton Sci*, 24, pp.87-96.
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- 21. Fisher, D.K., Woodruff, L.K., Anapalli, S.S. and (2018). Open-source wireless cloud-connected agricultural sensor network. Journal of Sensor and Actuator Networks, 7(4), p.47.
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#### References:

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Phone: 662 379-1680

**OBJECTIVE:** Seeking the GS-13 Physical Scientist position in the Water Division to use my skills in advancing the Agency's mission in protecting the environment and human health.

#### SUMMARY OF QUALIFICATIONS:

- Fourteen years of experience under the Clean Water Act in reviewing, and analyzing state and/or organization water programs and recommending changes; analyzing and evaluating new or revised environmental guidelines to determine impact on water resources
- Flexible, adaptable, and team-focused member of the Water Division with willingness to help my team and step up where needed.
- Expert in identifying sources of contamination in a watershed and developing restoration plans to address impairment.
- Knowledge of pertinent federal, state, and local laws and regulations, policies, guidance reporting requirements, program management concepts, principles and practices including the Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and/or other water quality laws.
- Recognized for skills in oral communication and collaboration sufficient to provide expert guidance and negotiation on complex aspects of environmental protection policies, plans and programs.
- Experienced in written communication sufficient to respond to a wide variety of external inquiries, and develop program reporting, policies, and guidance.
- Knowledge of water program management concepts, principles, and practices.
- Experienced in developing, planning, and implementing water protection programs and requirements.
- Experience and knowledge of federal regulations, laws, policies, and practices governing grants administration
- Experience reviewing Total Maximum Daily Loads (TMDL) and Watershed Restoration and Implementation plans and develop rationales, recommendations and other documents to support EPA's decisions.
- Experienced Project manager and Contracting Officer Representative (COR) on complex and dynamic projects under tight deadlines.
- Experience with large complex projects and working in collaboration with programs, various groups and industries and to effectively communicate creative solutions and recommendations.
- Experience with evaluating stormwater National Pollutant Discharge Elimination System (NPDES) permits and assessing it for compliance with federal and state water quality standards.
- Experience with communicating detailed policy and procedural information to the other government organizations, the general public

- and key stakeholders in a cross-cultural environment, and with synthesizing and communicating stakeholder concerns.
- Knowledge of environmental sciences, to assess and correlate environmental data, verify results, and discuss technical aspects of work with scientists, engineers, and other environmental experts.
- Experience with stormwater sources of pollution from industrial, construction and municipal sources and good understanding of effective Best Management Practices (BMP) and Low Impact Development (LID) to help mitigate stormwater sources of contamination.

#### **EXPERIENCE**

Environmental Protection Agency, Seattle, WA 07/2012 - Present Environmental Protection Specialist (full-time at 40 hrs/week) GS-0028-12 Watershed Stormwater Coordinator

### **Duties and accomplishments include:**

- Stormwater Coordination
- Stormwater Coordinatio
  - Oversee storm water media program to ensure compliance with environmental requirements, and resolve unusually complex, controversial, or sensitive environmental and restoration problems.
  - Serve as a programmatic and technical expert on stormwater quality and/or restoration programs.
  - Reviews and implements environmental technical standards, guidelines, policies, and formal regulations related to stormwater, Total Maximum Daily Loads (TMDLs), water quality permits and nonpoint source pollutants.
  - Played an important role in assisting a permit writer on storm water permits.
  - Develops and strengthens the stormwater program and influences policy.
  - Advises management and staff on stormwater policy decision that pertain to Total Maximum Daily Loads (TMDL) and Stormwater Permits.
  - Constantly improves stormwater TMDLs that influence policy.
  - Oversees stormwater programs integration of restoration plans and permits to ensure compliance with environmental requirements, and resolves unusually complex, controversial, or sensitive environmental problems.
  - Serves as programmatic and technical expert on water quality programs and advises project team consisting of TMDL leads, state,

- local and tribal governments/ non-profits on project goals and the program's effectiveness towards protecting lakes, rivers, streams, and other waterbodies.
- Reviews and implements permits and environmental technical standards, guidelines, policies, and formal regulations and recommends best ways of applying it between TMDLs and permits.
- Works on technical contracts to develop and implement Clean Water Act project plans.
- Evaluates Best Management Practices (BMP) for effectiveness and its protection towards surface waters, drinking water, source water and ground water.
- Reviews watershed implementation plans and provides technical assistance for plans that have urban, agricultural, coastal, and rural components.
- Prepares analytical papers or position documents which present and analyze complex water program policy and regulatory analyses, summaries, and recommendations.
- Works with state counterparts and multiple agencies to resolve controversial policy decisions when there are conflicting goals and priorities between agencies.
- Makes recommendations on significant stormwater sources by compiling, categorizing, and tracking TMDL – specific stormwater information by source (i.e., industrial, municipal, construction) and by regulatory classification (e.g., Phase I, Phase II, unregulated).
- Provides technical assistance to ODEQ on development of Total Maximum Daily Loads and effective Water Quality Implementation Plans.
- Assists in development of the national training modules on innovative stormwater TMDLs using modern methodologies (such as flow and impervious cover) and integrating stormwater permits and TMDLs.
- Develops environmental guidelines consistent with environmental regulations and standards to improve water quality by providing recommendations of stormwater integration in TMDLs and advanced ways of stormwater sources assessment and tracking. My project guidelines are developed to be consistent with environmental regulations and standards and it becomes an enforceable requirement of NPDES permits. I have also trained others to do this and often get consulted on this task.
- Participated in national workgroup for stormwater rulemaking and recommended changes. Discussed with senior MS4 permit writer on its implications to EPA R10 and avenues for TMDL integration.
- Analyzed 2010 Stormwater Memo from HQ<sup>1</sup> and recommended changes to the R10 stormwater program to ensure our adherence to

<sup>&</sup>lt;sup>1</sup> Also informally referred to as the 2010 Hanlon Memo – see <a href="https://www3.epa.gov/npdes/pubs/establishingtmdlwla\_revision.pdf">https://www3.epa.gov/npdes/pubs/establishingtmdlwla\_revision.pdf</a>.

EPA's regulations at 40 CFR § 122.44(d)(1)(vii)(B) and 40 CFR § 122.44(i).

- My analysis became guidelines for the R10 Watershed Section and States.
- o Worked with Senior MS4 permit writer on integrating stormwater permits with TMDLs that were consistent with the 2010 Stormwater Memo.
- Completed outreach to states on how to be consistent with the 2010 Stormwater Memo. Some outreaches were completed through presentations of my analysis, recommendations, and guidelines.
- Reviewed the 2013 court's decision on the Accotink Creek surrogates TMDL<sup>2</sup> and analyzed its implications for R10 TMDLs. The Accotink Creek TMDL established a maximum stormwater flow rate as a surrogate to sediment to address the impairment caused by stream bank and streambed erosion. At the time of this court decision, R10 was providing technical support to the state on developing surrogate TMDL targets for the Soos and Squalicum Creek TMDLs. I provided recommendations on how to best address flows in stormwater TMDLs.
- Analyzed 2014 Stormwater Memo from HQ<sup>3</sup> and recommended changes to the stormwater program to ensure our adherence to EPA's regulations at 40 CFR § 122.34(b)(5) and 40 CFR § 122.44.
  - o This 2014 memo replaced the 2010 memo. My analysis became guidelines for the Watershed Section and States.
  - o Worked with Senior MS4 permit writer on integrating stormwater permits with TMDLs that were consistent with the 2014 Stormwater Memo.
  - O Completed outreach to states on how to be consistent with the 2014 Stormwater Memo. Some outreaches were completed through presentations with the states of my analysis, recommendations, and guidelines.
- Performed extensive research on funding related to municipal Clean Water State Revolving Funds (CWSRF), Drinking Water State Revolving Funds (DWSRF), National Estuary Program (NEP), Tribal 106 programs<sup>4</sup> and funding eligibility for Alaskan tribes.
- Reviews restoration plans and reviews for point and non-point sources of pollutants and its impact on watershed and wetlands protection. Provides recommendations on nature-based solutions for managing precipitation driven pollutants.

<sup>&</sup>lt;sup>2</sup> Va. Dep't of Transp., et al. v. EPA, et al., No. 1:12-CV-775 (E.D. Va.) (Mem. Op. issued Jan.

<sup>3, 2013)(</sup>O'Grady, J.), District Court for the Eastern District of Virginia

<sup>&</sup>lt;sup>3</sup> See <a href="https://www.epa.gov/sites/default/files/2015-">https://www.epa.gov/sites/default/files/2015-</a>

<sup>12/</sup>documents/epa\_memorandum\_establishing\_tmdl\_wlas\_for\_stormwater\_sources\_2014\_00 000002.pdf

<sup>&</sup>lt;sup>4</sup> Tribal 106 grants provide financial assistance to eligible tribes to establish and administer programs for the prevention, reduction, and elimination of water pollution.

- Reviews Restoration and Watershed Based Plans for non-point sources and recommends ways to integrate stormwater management with other Clean Water Act requirements.
- Mentor's entry level staff on TMDL review and approval process where the TMDL will be legally defendable and technically justifiable.
- Mentors staff across the nation on Contracts and Project management.
- Reviews Quality Assurance Project Plans (QAPPs)
- Seen as an expert in analyzing stormwater approaches in Clean Water Act related projects. Sought after by peers for recommendations on ways to be effective and to develop guidelines for regulations to assist others stay on track with stormwater programs requirements. Developed national training modules as well on these subject and trained others in this area of expertise.<sup>5</sup>

#### Contracts and Grants related to the Clean Water Act

- Have contributed to improvements in contracting processes.
- Serves as a Contract Officer's Representative for contracts, Project Officer for grants, cooperative agreements, and interagency agreements in accordance with federal regulations, and agency policies and practices
- Contributing in various ways to the R10 Watersheds Section
  - Works as a Contracting Officers' Representative (COR) to coordinate with HQ and ensure TMDL dedicated contract funding is in place and adequate to support critical technical needs.
  - Serves as the Task Order COR (TOCOR) on several different temperature-related contracts supporting the TMDL program including Sandy, North Umpqua, Willamette, and Snake-Hells Canyon.
  - o Perceived as a leader amongst peers as a COR.
- Manages multiple dynamic and complex contracts and federal assistance agreements and advises supervisors and staff on contracts and grants policy and procedures. Also leads ad hoc teams.
- As a TOCOR professional as part of the Federal Government acquisition program performing contract management activities and functions, my responsibilities include:
  - Writing performance work statements for complicated task orders under OW's Technical Support for Assessment and Watershed Protection contract. This is a Multiple Award Contract which provides support for watershed protection,

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<sup>&</sup>lt;sup>5</sup> This work includes providing technical advice and guidance on the following for the Stormwater program: implementation of environmental regulations or programs; and compliance assistance for environmental regulations or programs; and evaluation of environmental regulations or programs.

- climate impacts, wetlands, green infrastructure, and water programs under the Clean Water Act (CWA) and the Marine Protection, Research and Sanctuaries Act (MPRSA).
- o Working with the Contractor and state counterparts on communication strategies covering multiple partnering agencies to have effective outcome on data solicitation and water quality restoration efforts. Develops training material and provides training and mentoring to new and seasoned Contracting Officer Representatives (CORs).
- o Directing the work of Contractors and other staff and ensures it is in line with the agreement negotiated.
- o Working on watershed contracts by planning projects, reviews, and evaluates proposals/work plans, determines resource requirements, monitors program accomplishment, writes project description, and defines program direction.
- o Serving as Contracting Officer Representative and alternate Contracting Officer Representative for the national watershed contract and plans projects, determines resource requirements, monitors accomplishments, writes project descriptions, and defines program direction and activities.
- O Conducting formal presentations and briefings on Technical Directions to EPA peers where technical and scientific concepts are presented based on the audience's needs (appropriately adjusted to the audience) in ways understandable to people from non-technical, as well as technical, backgrounds. Also trains others in performance of this task. Others have also consulted me as an expert for assistance in performing this task as well.
- o Serving on the Technical Evaluation Panel (TEP) for OW's next Technical Support for Assessment and Watershed Protection contract which is expected to be a Multiple Award Contract with a small business set aside (Up to 4 Awardees) under the GSA Multiple Award Schedule for 2022.
- As a grants Project Officer, I have had education/experience with applications, workplans, budgets, Performance Partnership Agreements (PPAs) and Performance Partnership Grants (PPGs), programmatic commitments, outcomes and outputs, grant regulatory requirements, funding recommendations, commitment notices, award documents and regional grant award process, Post-Award Monitoring, programmatic reviews, State and Tribal Assistance Grants (STAG) funding management, and EPA's grants competition policy. Most of my experiences have been with Puget Sound grants and interagency agreement activities which can be very complex, difficult, or novel, including (but limited to) the following projects:
  - Multiple Puget Sound grants including funding drawdowns, agreement file maintenance, closeout, and ultimate records disposal. Generally, I had overall responsibility for monitoring

- performance and provided outstanding customer service to grantees to help create "win-win" situations for both the grantees and the agency.
- o An interagency agreement (IA) with Department of Energy (DOE) to work with Pacific Northwest National Laboratory (PNNL) for technical work on an Integrated Water Modeling and Decision Support for Water Management.
- o An interagency agreement (IA) with the United States Geological Survey (USGS) for a dam removal study.
- o A grant to Environmental Science Institute for work on Building a Puget Sound Wide, Community Watershed Database and Analysis System to Facilitate Science Based Resource Management and Restoration.
- o A grant to Seattle Public Utilities for a Pipers Creek Flow Control Plan which used watershed planning and green stormwater infrastructure to improve Piper's Creek stream flows.
- A grant to King County for: a Quarter Harbor Nitrogen Management Study; Regulatory effectiveness monitoring for developing rural areas; and Stewardship assistance in the Snoqualmie.
- o Reviewed Urban Waters proposals and Environmental Justice proposals, including ranking proposals competitively for recommendations for funding through their respective RFPs (request for proposals).
- o Provided stormwater recommendations to Idaho's PPA which does use STAG funds.
- Technical and fiduciary responsibilities for both contracts and grants include:
  - Monitors compliance of contracts and grants agreements (baseline and advanced); and negotiates funding levels for project needs.
  - o Reviews financial and progress reports and evaluates Contractor and Grantees deliverables.
  - o Solves complex issues with grants, watershed restoration projects and contracts with simple and effective solutions.
  - o Identifies potential problems that could interfere with achieving project goals and milestones and develops recommendations.
- Manages multiple dynamic and complex contracts and federal assistance agreements and advises supervisors and staff on contracts and grants policy and procedures. Also leads ad hoc teams.

#### TMDL Reviewer

 Oversee development of TMDL water media program to ensure compliance with environmental requirements, and resolve unusually

- complex, controversial, or sensitive environmental and restoration problems
- Reviews and implements environmental technical standards, guidelines, policies, and formal regulations
- Received as part of team, a Gold Medal for Exceptional Service for establishing the Columbia and Lower Snake River temperature TMDL, providing benefits to threatened and endangered species while bringing to completion work pending for more than two decades (<u>EPA National - 2021</u>).
- Plays an important role and has made significant contributions to the work of the Watersheds Section through TMDLs.
- Reviews watershed restoration plans and writes technical justification memo for approval of the restoration plan.
- Ensures that TMDLs accurately interpret the Water Quality Standards and beneficial uses.
- Ensures TMDs developed by states accurately interpret 303(d) listings of impaired waterbodies and addresses it adequately in TMDLs.
- Discusses TMDL implementation with states and provides recommendations on best approaches for water conservation and demand management.
- Reviews available wasteload allocations to facilitate where municipal wastewater permits can be consistent with the assumptions and requirements of a TMDL.
- Conducts formal presentations and briefings on my recommendations for approval of TMDLs where technical and scientific concepts are presented based on the audience's needs (appropriately adjusted to the audience) in ways understandable to people from non-technical, as well as technical, backgrounds. Also trains others in performance of this task. Peers have also consulted me as an expert in performing these tasks as well.
- Applies regulations, policies, programs, watershed management strategies, point source controls, nonpoint source controls, water quality restoration and protection to the Clean Water Act when reviewing TMDLs for approval or for compliance with stormwater program. This combines my responsibilities to both the TMDL and stormwater programs.
- Holds informal tribal listening sessions with tribes to inform them of EPA's action on watershed restoration plans and provide them with technical and policy related information on the watershed restoration plans implications on tribal interests.
- Manages complex and large-scale projects that are controversial and involve many other government organizations. These projects impact the entire region.
- Serves as lead on the Coquille and Mid-Snake TMDLs establishing key relationships with the states, coordinating comments on drafts, facilitating, and engaging in stakeholder meetings, and accessing technical resources to support the efforts. I have been willing to

step-up and help be an integrating figure on the team. A recent example includes completing a desk statement for the Mid-Snake TMDL project that included the integration of multiple technical documents, and development of talking points and background information to ensure R10 can deliver consistent messages regarding this high-profile project.

- o As lead to the Mid-Snake TMDL project team, I have dealt with a complex and controversial TMDL with issues that have no precedent or guidelines. Therefore, it requires a high degree of judgement and originality to develop environmental guidelines to improve water quality.
- o As lead on Coquille River Multiparameter TMDL, I work with the State to develop messaging on data and technical approaches used to ensure that the Coquille will meet the state's Water Quality Standards. Also advises the state on ways to gather input, strategic ways of sharing information to reach consensus and resolving problems.
- Resolves issues related to the applications of Water Quality Standards in TMDL and 303(d) listings on the Coquille Watershed by working across program and ensures that decisions made by the TMDL program does not hinder the Water Quality Standards or listings programs.
- Reviews draft TMDLs and technical reports and provides comments.
- Attends Watershed Advisory Group meetings in Idaho to represent EPAs interests on TMDLs.
- As TMDL lead on the Mid-Snake TMDL, works with State, Watershed Advisory Groups (WAG), Federal Agencies, local governments, and other stakeholders (e.g., industry, agricultural, aquaculture sectors, legal advocates) on TMDL environmental policy or regulations to gather input on technical aspects of the TMDL that is in development, share information on approvability criteria for TMDLs to reach consensus, resolve problems that arise and provide comments to represent EPA.
- Consults and coordinates with Federally Recognized Tribes on the implementation of TMDLs, environmental programs and/or projects. Also provides advice to other staff on best ways to engage with Federally Recognized Tribes.

#### Technical Assistance

- Serves as a programmatic and technical expert on water quality and/or restoration programs, advises watershed section on ways to address stormwater sources of pollutants.
- Reviews and implements environmental technical standards, guidelines, policies, and formal regulations related to stormwater, TMDL, permits and nonpoint sources.
- Works with multiple agencies and voluntary partnership programs on the development of Western Oregon's first "Template for LID Stormwater Manual".

- Provides technical assistance and recommendations to states on stormwater during development of implementation plans for TMDL's
- Reviews surface water monitoring reports and provides recommendations on practices to use that will help achieve Water Quality Standards.
- Participates in national stormwater workgroups and provides input representing R10.
- Prepares written communications to convey technical and nontechnical information concisely and clearly to persons with varied technical and business backgrounds.
- Conducts sources analysis for watershed restoration plans, identifies all possible sources of runoff into impaired waterbodies and provides recommendations to TMDL program on addressing runoff.
- Provides training to states and other stakeholders on developing watershed restoration plans that are consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES) permits.
- Analyzes water quality monitoring data by using spreadsheets, databases such as Storage and Retrieval Data Warehouse (STORET)<sup>6</sup>, International Stormwater BMP Database, Water Resources Database (WRDB), stormwater sources assessment visualization using Geographic Information System (GIS) and water quality modeling tools for the purposes of reviewing allocations for the TMDL or Stormwater programs.

#### Tribal Specialist

- Received a Bronze Medal as part of R10's EPA Tribal Environmental Plans (ETEP) Team for developing, implementing, and completing efficient and effective communication processes to create, review, and communicate EPA and tribal priorities in more than 230 joint EPA-Tribal Environmental Plans in Region 10 (EPA Region 10 -September 2019).
- Have continued to be a key contributor on work related to the Region's work with Tribes.
- Serves as Tribal Specialist for the R10 Water Division and assists in tribal coordination and consultation.
- · Works with staff in the R10 Water Division on tribal issues and develops a communication strategy for specific projects to effectively communicate with tribes.
- Works with Tribal Trust and Assistance Branch (TTAB) and staff in the R10 Water Division to make sure tribal interests are considered in Water Division's decision-making process.

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<sup>&</sup>lt;sup>6</sup> STORET has been replaced by the Water Quality Exchange (WQX).

- Reviews Environmental Tribal Environmental Plans (ETEPs)<sup>7</sup> and presents to senior management in the R10 Water Division the tribal needs, challenges, and constraints. Also facilitates discussion on how to provide resources to tribes to address tribal needs.
- Conducts formal presentations and briefings on EPA Tribal Environmental Plans (ETEP) to senior management where technical and scientific concepts are presented based on the audience's needs (appropriately adjusted to the audience) in ways understandable to people from non-technical, as well as technical, backgrounds. Also trains others in performance of this task. Others have also consulted me as an expert for assistance in performing this task as well.
- Provides training on the Drinking Water Direct Implementation program to staff in the Water Division to educate them on Tribal work.
- Provides technical assistance to Federally Recognized Tribes on stormwater integration, monitoring best management practices for stormwater mitigation, implementation of TMDLs, water quality sampling and thermal enrichment.
- Did extensive research on arranging for financial assistance to Federally Recognized Tribes, held a discussion with key staff in the Water Division and summarized all applicable funding opportunities. This deliverable was used by the Branch Chief of the Permits Drinking Water and Infrastructure Branch (PDWIB) to further his work on funding related matters.
- Directly implements federal environmental programs affecting Federally Recognized Tribes such as the CWA, TMDL programs, Water Quality Standards.
  - o provided background material for consultations, and attended one formal consultation with the RA.
  - o Worked on a team on directly implementing Federal Environmental Programs, such as the TMDL and Stormwater programs, on the 2015 Clarks Creek Dissolved Oxygen and Sediment TMDLs. This project took some time to develop with multi-jurisdictional coordination and included the Federally Recognized Tribe of the Puyallup Tribe of Indians (PTI) (with lands on the north part of the watershed) and the Washington Department of Ecology (Ecology).
- Watershed Section's Non Point Source, Environmental Justice
   (EJ) and Equity Lead

<sup>&</sup>lt;sup>7</sup> EPA-Tribal Environmental Plans (ETEPs) are jointly developed plans outlining how each tribe and the EPA will work together to support the tribe's environmental goals within the context of all EPA tribal programs, including, but not limited to, the Indian Environmental General Assistance Program. ETEPs are also a planning and communication tool for the tribe and EPA that provides a road map for future decision-making.

- Participates in national workgroups to develop solutions for integrating EJ, and Equity in the non-point source program.
- Provides recommendations to EPA HQ staff to take to senior political leadership to help with informing policy reform that will positively make a difference for EI communities.
- Presents at a national level and provides technical assistance to national workgroup (consisting of states, tribes, municipalities, and other EPA staff) on best ways to develop technical resources that will help disadvantaged communities work towards watershed restoration.
- Provides technical support and recommendations on ways to analyze surface water and ground water/underground injection control related contamination and best ways of mitigation.

Environmental Protection Agency, Seattle, WA
6/2009- 06/2012
Environmental Scientist (full-time at 40 hrs/week)
GS-130109 - GS-1301-11

Successfully completed the following career developmental rotations as part of the Environmental Careers Program (ECP):

### Water Division, in the Drinking Water Branch

- Participated in group research as part of the Environmental Careers Program (ECP) on the impact that stormwater has on wetlands and watersheds. My group evaluated the effectiveness of Low Impact Development (LID), Best Management Practice (BMP) and Green Infrastructure (GI) to control stormwater runoff. This research was presented at the ECP conference in New Orleans in 2011.
- Worked with Region 1 states to identify limitations of using LID in their permitting process and reached out to consulting firms to understand their constraints when using nature-based solutions and educated them on the benefits of using LID.
- Developed a regulatory flowchart to help EPA staff and stakeholders better understand complex requirements of the Confined Animal Feeding Operations (CAFO) regulations.
- Assisted with oversight of the CAFO regulations and technical standards for Region 10 states.
- Organized public meetings, assisted with developing Idaho's CAFO permits and worked with regional agricultural advisor and permit writer in responding to public comments.
- Updated EPA headquarters on the various types of CAFO's in Region 10 and major agricultural issues related to CAFO's.
- Assisted with implementing CAFO regulations in Yakima.

## National Environmental Policy Act Unit (NEPA)

Reviewed and commented on Environmental Impact Statements.

- Assisted program staff with development of Ocean Dumping and Sediment Management website.
- Completed literature and background search on existing data at the mouth of the Yaquina River in Oregon and the entrance to Grays Harbor in Washington to support the program's efforts to designate Ocean Dredged Material Disposal Sites and establish site management and monitoring plans at those sites.

### Solid Waste and Toxic Unit (SWAT)

- Conducted research on childhood lead poisoning in the region and developed a Standard Operating Procedure (SOP) for Region 10 to find lead hotspots.
- Worked on the Toxic Substance Control Act (TSCA) and coordinated with other federal and public health agencies to prevent childhood lead poisoning.
- Conducted outreach and formed Memorandum of Agreements (MOA's) with other agencies such as the US Center of Disease Control (CDC), Medicaid, Agency for Toxic Substances and Disease Registry (ATSDR) and state health agencies to gather blood lead data.
- Wrote position papers to advise senior management on childhood lead poisoning to help raise awareness and influence policy.

# Office of International and Tribal Affairs (OITA) - Trade and Economics Program (Washington, DC)

- Worked with the Senior Advisor to coordinate Agency positions for ongoing trade negotiations, including the Doha Round of WTO negotiations and the Trans-Pacific Partnership trade negotiations.
- Reviewed World Bank Project Proposals for China, Vietnam, Laos, and Indonesia and helped OITA fulfill their statutory obligations under what is known as the Pelosi Amendment.
- Researched and analyzed documents to provide helpful recommendations and suggestions to OITA regarding Brazil's bilateral trade agreements with other countries, and fundamental information about how financial bonds work to help OITA consider options for the development of bonds to achieve environmental objectives.

## Information Ressources Services Branch (ISB)

- Developed a regional training manual on Data.gov and coordinated with EPA Headquarters to maintain consistency with training approaches used nationally.
- Promoted Data.gov within Region 10 and presented at the all supervisors training in Region 10.
- Conducted outreach on collaboration tools within Region 10.
- Wrote articles in the Information Resources Unit (IRU) newsletter to help customers understand IRU's roles and how to work in collaboration with IRU instead of against them.

# Environmental Protection Agency, Seattle, WA 06/2008 - 01/2009 Environmental Protection Assistant (full-time at 40 hrs/week)

# Internship position in Water Division, in the Drinking Water Branch

- Assisted with compliance of the Long Term 2 (LT 2) Surface Water Treatment Rule. This rule applies to all public water systems (PWS) which treat surface water or groundwater under the direct influence of surface water (GWUDI).
- Communicated with water systems to help them understand requirements of the drinking water rule and comply with the LT 2 rule.
- Assisted with Direct Implementation in the Drinking Water program.
- Assisted with data entry in the Safe Drinking Water Information System (SDWIS) database.
- Researched Acute Health Levels for contaminants regulated under the Safe Drinking Water Act (SDWA).
- Assisted with regulatory follow up actions needed when maximum concentration levels (MCL) were exceeded. Analyzed water systems monitoring schedules and issued certifications.
- Coordinated Region-10's Combined Federal Campaign (CFC) and effectively managed Key-Workers for the CFC Campaign. Also planned activities and charity events for over 600 people.

#### **EDUCATION**

Oregon State University, Corvallis, OR - current

2022

- current

Anticipated - Master's Degree in Environmental Science

**Concentration: Water Resources** 

Science quarter credits: 6

Natural Resource Management quarter credits: 3

**Completed courses:** 

- BEE 558 Nonpoint Source Pollution Assessment and Control (taught by the Biological & Ecological Engineering department of the College of Engineering). Completed with 4.0 GPA.
- WRP 521 Water Conflict Management and Transformation (taught by the Program in Water Conflict Management and Transformation of the College of Earth, Ocean, and Atmospheric Sciences). Completed with 4.0 GPA.
- FW 518 Urban Ecology (taught by the Fisheries, Wildlife, and Conservation Sciences Department). Completed with 4.0 GPA.

University of Washington, Seattle, WA 2005 - 2009

Bachelors in Political Science with a minor in Environmental Science and Resource Management (GPA: 3.63)

Science quarter credits: 32

Natural Resource Management quarter credits: 8 Concentration: Environmental Science, Natural Resource Management, Political Economy.

- Dean's Honor List and Annual Dean's List (2005-2009)
- Merit Scholarship recipient

# **SKILLS, INTERESTS AND SPECIAL AWARDS**

- Received performance rating of distinguished in 2021 PARS.
- Gold Medal for the Columbia River Temperature TMDL.
- Bronze Medal for work on the Tribal Program.
- Recognized as national expert in Contracts.
- Peer award for displaying leadership skills and guidance.
- Contracting Officer Representative (COR) Level II certified.
- COR Level III training.
- 24-hour health and safety training.
- Meeting facilitation training.
- One of the few applicants selected nationally to participate in the ECP program.
- Quad lingual in English, Spanish, Hindi, and Fijian.
- Professional Indian classical dancer and henna artist.
- Certified in project management through the Federal Acquisition Institute (FAI).
- Working on PMI Project Management Certification
- Grants Officer Training

# **Environmental Geologist**

#### **EDUCATION**

Winona State University (WSU)

Winona, MN

Bachelor of Science: Geoscience, Environmental Science Option

May 2017

Major GPA 3.53

Coursework completed: Watershed Science, GIS, Sediment and Stratigraphy, Geochemistry, Advanced

Geomorphology, Environmental Geoscience, Ecology, Environmental Policy, and Environmental Chemistry Independent

Research: Metal Accumulation in Soil

#### **EXPERIENCE**

Medtronic

Boulder, CO

Design Technician

2018 - 2021

- Carry out various test set up and procedures for medical equipment in a laboratory setting
- Organize and plan lab material deliveries on a daily basis and keep accurate records
- · Use a microscope and thermal camera to record and measure thermal data

Minnesota Department of Agriculture

Minneapolis, MN

Paraprofessional

2016 - 2018

- Create graphical reports from Microsoft Excel data collected from monitoring stations within the Root River Watershed to better understand the impact of soil practices
- Apply GIS software to make reports designed to assist with better soil conservation techniques
- Create a story from Excel data to convey best soil practices within the watershed

Fastenal

Winona, MN

Lab Technician

2017 – 2018

- Follow lab procedures to test mechanical properties of various fasteners
- Operate spectrometer to analyze chemical makeup of different metals
- Measure and check quality of fasteners to specific criteria

Winona Daily News

Winona, MN 2009-2011

Photographer

Create visual stories using photographs and multimedia

- Work independently and cooperatively to edit and convey a unified story
- Operate on tight deadlines
- Utilize both print and digital media to display images



#### UNIVERSITY OF IDAHO, Moscow, ID

Master of Public Administration (May 2022)

Emphasis in Adult Leadership

Honors: 4.0 GPA

#### **Relevant Coursework**

Government Budgeting, Local Government Law, Public Personnel Administration, Public Administration Theory

#### UNIVERSITY OF IDAHO, Moscow, ID

Bachelor of Science in Environmental Science (December 2019)

Specialization in Climate Change and Social Impacts

Honors: 3.46 GPA, Dean's list for five semesters, graduated early, received climate change certificate

#### **Relevant Coursework**

Technical Writing, Critical Thinking, Principles of Microeconomics, Introduction to Environmental Regulations

# **Work Experience**

#### Intern at Idaho Department of Environmental Quality (Aug. 2021-December 2021) Supervisor: Ben Jarvis

- -Surveyed businesses in Idaho for chemical solvent information.
- -Researched new approaches on dry cleaning product replacement.
- -Strategized ways to overcome public distrust in a government setting.

#### Manager at Ruszoni's Pizzeria (May 2016-June 2022)

- -Supervised the business, worked closely with employees, and planed events for the public.
- -Create weekly schedules for workers and for community events.
- -Worked closely with the owner to create a safe and productive work environment.

#### University of Idaho Center on Disabilities and Human Development (Jan. 2018-Dec. 2019)

-Scribe for University of Idaho students with disabilities.

#### Pitkin Tree Nursery-University of Idaho (Oct. 2017-May 2018)

-Planted, treated, and shipped trees to companies and tree farms.

#### Relevant Experience

- -Skilled in use of Microsoft Office Applications and digital media.
- -Trained in filing confidential paperwork and payroll for district employees.
- -Experienced in public education and speaking, along with collaboration in group settings.
- -Knowledgeable about data analysis.
- -Created a proposal for the implementation of bike lanes and a bike share program for Weiser, ID.
- -Collaborated with a team to present information about the changing climate to environmental scientists.
- -Conducted an experiment on invasive species and found solutions that were then presented to stakeholders.
- -Field work conducted in several undergraduate program labs and in science competitions.





**Objective**: Idaho Department of Environmental Quality analyst with experience addressing environmental issues, seeking to utilize my expertise in a broad range of water quality issues and contribute to the expansion of the Environmental Protection Agency's mission in the Boise, Idaho Office.

#### Relevant Experience:

- Serve as a programmatic and technical authority on surface water quality standards.
- Knowledgeable about biological science principles related to the Clean Water Act and/or the Safe Drinking Water Act.
- More than one year of full-time experience equivalent to the GS-11 level defined as advising senior management, supervisors, and staff on matters concerning environmental water protection programs; evaluating water program plans and practices.
- More than one year of full-time experience in applying Clean Water Act and/or regulations and policies to the development or implementation of water programs.
- Oversee contracts and cooperative inter-agency agreements between state agencies and with federal agencies.
- Project team leadership.
- Interpret scientific and technical information and make recommendations to supervisors, staff, and the public on biological science principles related Clean Water Act and water quality issues.
- Serve as a DEQ liaison and represent the agency at internal meetings and with external stakeholders.
- Manage contracts and cooperative agreements with USGS, USBR, and private businesses.

- Apply for and manage grant funding from public and private grantors.
- Develop and manage projects to address diverse water quality issues.

#### **Water Quality Standards Analyst**

Idaho Department of Environmental Quality Boise, ID 04/16 – Present \$27.97/hour, 40 hours/week

Supervisor: Elizabeth Spelsberg (208) 373-1255

WATER QUALITY STANDARDS: Serve as a programmatic authority on surface water standards and support DEQ staff in understanding state and federal surface water quality standards and how they apply to Total Maximum Daily Loads (TMDL) and Idaho Pollutant Discharge Elimination System (IPDES) permits. Support water quality standards personnel by researching surface water quality standards topic areas, writing white papers to inform staff and outside committees, and review and edit technical and non-technical documents. Consult DEQ staff on the implementation of water quality standards and develop and conduct training for DEQ water quality staff. Identify topics and develop presentations for the triennial review of water quality standards in compliance with Clean Water Act responsibilities. Draft an updated Use Attainability Guidance. Serve as a DEQ representative during the Columbia River Operations Environmental Impact Statement.

PROJECT DEVELOPMENT AND BIOLOGICAL KNOWLEDGE: Use GIS, biological data, and ambient monitoring data to research and illustrate Idaho designated beneficial uses and where the uses are supported, unsupported, and undesignated for DEQ staff, administration, stakeholders, and the general public. Research current water quality conditions and historic aquatic life beneficial uses to determine an undesignated water body's highest attainable uses and the appropriate aquatic life beneficial use to designate for that waterbody. Analyze surface water data for trends or patterns in diverse streams from deserts to temperate forests in order to determine the appropriate aquatic life beneficial use designation.

COMMUNICATIONS AND OUTREACH: Represent the agency to journalists researching Idaho water bodies about beneficial uses, impairments, and TMDLS. Present on water quality and aquatic biology topics to elementary, junior high/middle school, and high school classes. Accept interview requests from college (undergraduate and graduate) students researching water issues in Idaho and the Pacific Northwest. Develop and conduct training on Idaho water quality standards and designated beneficial uses. Draft an updated Use Attainability Analysis guidance document.

#### **Harmful Algal Bloom Coordinator:**

TEAM LEADERSHIP: Lead a multi-agency working group to develop a communication response

plan to guide DEQ and Idaho health district staff in responding to cyanobacteria blooms and defining the data needed by the idaho health district's to issue and lift public health advisories. Served as a sub-group team leader and co-author of the Interstate Technology Regulatory Council (ITRC) *Strategies for Preventing and Managing Harmful Cyanobacterial Blooms (HCBs)*, Section 5. Strategies for Communication and Response Planning for HCBs sub-group team co-leader and co-author (<a href="https://hcb-1.itrcweb.org/">https://hcb-1.itrcweb.org/</a>). Assist DEQ regional office staff as needed

in understanding the Response Plan, speaking with the public, and field sampling.

PROJECT AND PROGRAM INITIATION FORMULATION AND PLANNING: Develop and write a Field Sampling Plan (FSP) for recreational water cyanobacteria sampling and monitoring. Provide support to regional office management and administrators in understanding cyanobacteria blooms and their implications. Initiate studies to identify the potential health threat posed by cyanobacteria. Assist in developing the DEQ Drinking Water program, Safe Drinking Water Act (SDWA) Fourth Unregulated Contaminants Monitoring Rule (UCMR4), cyanobacteria monitoring pilot project and serve as the working group science advisor. Work with the EPA Nutrient-Scientific Technical Exchange Partnership & Support program (NSTEPS) to refine remote sensing (satellite) products that will lead to predictive models for cyanobacteria blooms in Idaho waterbodies.

COMMUNICATION AND OUTREACH: Present on cyanobacteria and the DEQ response to a wide variety of interested groups, including the EPA Region 10 Harmful Algal Bloom workshop (2019), an EPA Region 8 HAB webinar (2021), the North Fork Payette Water Users working group, local media, and others.

BIOLOGICAL KNOWLEDGE: Microscopic identification of cyanobacteria. Draft and review press releases for DEQ and the Idaho public health districts on cyanobacteria harmful algal blooms in sensitive water bodies. Designed a StoryMap to share information on cyanobacteria harmful algal blooms, including a map to share the Cyanobacteria Assessment Network (CyAN) bloom data with the public (<a href="https://arcg.is/yOGu0">https://arcg.is/yOGu0</a>). Develop and maintain the Recreation Water Bloom Advisories and Warnings map and associated information tables

(www.deg.idaho.gov/water-quality/surface-water/cyanobacteria-harmful-algal-blooms/).

#### Volunteer

Boise River Enhancement Network Boise, ID 05/15 – 04/16

COMMUNICATION AND WRITING: Review, proof, and edit draft documents. Enter public comments on the draft BREN Plan into a spreadsheet for the BREN Coordinating Team and publication.

Research Boise River diversion and return volumes and locations.

#### **Mapping Team Volunteer**

Payette River Water Trail Coalition Payette River Basin, ID 09/14 – 10/2015

COMMUNICATION AND OUTREACH: Develop a spreadsheet for local, state, and federal agency personnel to document lake and river put-in and take-out information. Coordinate and review documents with the mapping team and the coalition director.

Design water trail maps and map templates using ESRI ArcMap, Google Earth, and Google maps.

#### Contractor

Trout Unlimited & Boise River Enhancement Network Boise, ID, 9/14 – 12/14 \$2,000 contract for work completed

Research recent Boise River restoration projects to maintain a record of "who is doing what, where."

# Public Lands Intern Idaho Conservation League

Boise, ID, 08/14 – 10/14 \$1,500/10 weeks, 32-40 hours/week

POLICY AND REGULATION: Research NEPA proposals on land and wildlife management actions and review the state and federal laws and policies that guide resource management in order to develop science-based comments. Attend field tours to review timber sales, mining projects, and forest restoration projects.

WATER QUALITY STANDARDS: Research NPDES permit violations through the EPA Enforcement and Compliance History Online website and research the TMDLs for the water bodies the permit violators discharge into.

#### **Fisheries Technician**

Idaho Department of Fish and Game Nampa, ID, 05/11 – 09/11 \$10.10, 40 hours/week

BIOLOGY: served as a trap-tender to maintain three screw traps in the Stanley basin. Correctly identify the species of fish that are trapped, especially Chinook salmon, Sockeye salmon, and

Steelhead trout, as well as native non-game fish species. PIT tag Chinook salmon and Steelhead trout with multiple use and single use injectors. Record data from trapped fish and enter it into PTAGIS and ISS (Access databases),

Collect DNA samples from spawned Chinook salmon and scale samples from Steelhead trout. Answer questions from kayakers, campers, and area visitors.

#### **Senior Restoration Project Manager**

Mid Sound Fisheries Enhancement Group \$44,000/year, 40 hours/week Seattle, WA, 08/07 – 04/10

WATER QUALITY STANDARDS research: Identify potential habitat restoration projects through researching TMDLs to better understand watersheds and the factors limiting salmon spawning and rearing. Follow Best Management Practices (BMP) during all construction activities.

PROJECT MANAGEMENT: Assess potential salmon habitat restoration projects and discuss potential solutions with private landowners and agency personnel. Manage projects from start to finish, ensuring that project documents are complete, cuManage and conduct stream physical habitat and fish passage barrier surveys using the Washington Department of Fish and Wildlife protocol. Assist in hiring and training new employees. Coordinate employee's daily schedules and activities.

BIOLOGICAL KNOWLEDGE: Design and install instream and riparian habitat restoration projects. Construct and install streamside equipment such as fish bypass diversions and two-way weir smolt traps. Design restoration site planting plans and installation and maintenance schedules for each season.

GRANT MANAGEMENT: Prepare, submit, and manage fish enhancement project grant proposals to local, state and federal government agencies, private foundations, and corporate sources. Prepare grant funded project and program reports as required by local, state, and federal government agencies, foundations and corporate donors.

COMMUNICATION: Maintain positive working relationships with property owners. Establish and maintain relationships with watershed coordinators and other lead-entities. Organize and manage volunteer and outreach events - including marketing and planning related activities to assist in promoting services and receiving donations.

REPRESENT THE ORGANIZATION: Serve as a member of the East WRIA 15 Salmon Recovery Funding Board Technical Advisory Group to review restoration projects for their ability to improve salmon habitat and water quality. Represent Mid Sound at watershed council meetings. Present Mid Sound project proposals to corporate and club donors.

#### **Manager and Field Biologist**

Stewardship Partners Approx. \$40,000/yr, 40 hours/week Snoqualmie Valley, WA 05/11 – 09/11

MANAGEMENT: Train field crew members and coordinate field crew schedules.

COMMUNICATION: Maintain positive working relationships with property

owners.

BIOLOGICAL KNOWLEDGE: Design restoration site planting plans and installation and maintenance schedules for each season. Prepare mitigation site reports and photo document seasonal changes.

#### Intern

WA Department of Ecology \$10/hour, 40 hours/week Yakima, WA, 6/05 – 9/05

BIOLOGICAL KNOWLEDGE: Sample aquatic plants from lakes and rivers; primarily Eurasian milfoil (Myriophyllum spicatum) and other non-native, invasive plant species. Report all plant samples, and occasional aquatic invertebrate samples, to the Yakima office and positively identify all species through the use of identification keys.

#### **Professional Memberships:**

- Ecological Society of America
- North American Lake Management Society
- Interstate Technology Regulatory Council

## **Education**:

- •EPA Water Quality Standards Academy, Washington, D.C., December, 2016. Master of Natural Resources, University of Idaho, Moscow, ID, 2011 − 2014 o Master Research: Urban Tributaries in the Boise Area: Potential for restoration of riparian zones in an urban interface.
- B.S. Biology, Seattle Pacific University, Seattle, WA, 2002 2004.

#### **Professional References:**

- Maureen Pepper: State Water Quality Specialist, USDA Natural Resources Conservation Service. <a href="mailto:maureen.pepper@usda.gov">maureen.pepper@usda.gov</a> (208) 378-5723.
- Tyler King: Hydrologist, USGS. <u>tvking@usgs.gov</u> (603) 892-2669.
- Graham Freeman: Aquatic Species Manager and Policy Advisor, Idaho Governor's Office of Species Conservation. <a href="mailto:graham.freeman@osc.idaho.gov">graham.freeman@osc.idaho.gov</a> (208) 334-2189. Robert Esquivel: City of Boise Environmental Data Analyst. resquivel@cityofboise.org, (208)



**Availability:** 

Job Type: Permanent Work Schedule: Full-Time

#### **Work Experience:**

#### U.S. Environmental Protection Agency – Region 10

1200 6th Avenue Suite #155, Seattle, WA 98101 United States 07/2020 - Present

Hours per week: 40

#### Alaska and Tribal Water Quality Standards Coordinator

Duties, Accomplishments and Related Skills:

- Coordinate with the state of Alaska and tribes in Region 10 to incorporate technical, scientific, policy, and legal considerations into new and/or revised water quality standards.
- Resolve conflicts as they arise through thorough engagement with state and tribal counterparts and including input from management, liaisons in headquarters, the Office of Regional Counsel, and others.
- Prepare technical support documents, memorandums, and letters to communicate EPA actions and recommendations for state and tribal new/revised water quality standards, and identifies implications to/for regional, state, and tribal programs.
- Develop biological evaluations for the purposes of Endangered Species Act consultation, in collaboration with fellow EPA staff.
- Participate in national water quality standards workgroups to share regional considerations and report key takeaways to colleagues in the Standards and Assessment Section.
- Provide guidance to tribes throughout the treatment as a state (TAS) application process and support an EPA team to review and take timely action on TAS applications.
- Review tribal multipurpose grants and Alaska's performance partnership grants on an annual basis.
- Serve as a technical, programmatic expert to relay water quality standards-related knowledge to other Clean Water Act implementation programs (water quality assessment/listing, water quality certification, National Pollutant Discharge Elimination System, etc.), as needed.

**Supervisor**: Hanh Shaw hanh.shaw@epa.gov

Okay to contact this Supervisor: Yes

#### U.S. Peace Corps - Zambia

71 A Kabulonga Road, Lusaka, Zambia Site located in Eastern Province, Zambia

02/2018 - 03/2020

Hours per week: 50+ **Forestry Extension Agent** 

Duties, Accomplishments and Related Skills: Technical Assistance: Food Security and Reforestation

- Planned and led capacity building programs covering topics such as agroforestry, environmental stewardship, conservation farming, tree planting, budding and grafting, and micro-livestock rearing.
- Supervised the construction of 13 community tree nurseries in three schools and neighboring villages. Each nursery had 100-600 polypots with beneficial agroforestry and indigenous tree species.
- Worked with the Zambia Forestry Department and acted as a liaison between government forestry officers, local NGOs, rural community members, and U.S. Forest Service contacts.

#### Secondary Projects

- Facilitated lessons in various public health/hygiene topics, women's empowerment, and leadership in two schools (Girls' and Boys' clubs with 30-40 students each) and in a rural health post.
- Wrote a grant to fund an environmental education camp for twenty-two youth (grades five through eight), four adult educators, and eleven Peace Corps volunteers.
- Reviewed seven PEPFAR (U.S. President's Emergency Plan for AIDS Relief) grants to ensure PEPFAR funds were used in the way the program intended, prior to submission to staff.

Supervisor: Donald Phiri (+260-97-943-8825) dphiri@peacecorps.gov

Okay to contact this Supervisor: Yes

#### **Snoqualmie Valley Preservation Alliance**

4621 Tolt Avenue, Carnation, WA 98014 United States

08/2017 - 01/2018

Hours per week: 10-20 Project Manager Intern

Duties, Accomplishments and Related Skills:

- Managed the organization of a flood prediction project to aid local farmers in protecting their crops and livestock. This included the site selection, deployment, procurement of materials, and maintenance of twenty ultrasonic depth sensors.
- Drafted reports and management plans to enhance project sustainability
- Collaborated with computer scientists, mechanical engineers, and farmers to build an online flood prediction program for the use of local farmers. The flood crests posted online were successful in beginning to predict the movement of flood events.

**Supervisor**: Cynthia Krass (425-549-0316) cynthia@svpa.us

Okay to contact this Supervisor: Yes

#### **Relevant Projects:**

#### Seattle University Department of Civil and Environmental Engineering

901 12th Avenue, Seattle, WA 98122 United States

10/2016 - 12/2017

Hours per week: 5-10

#### **Algae Bioreactor Student Researcher**

Duties, Accomplishments and Related Skills:

Constructed a raceway photobioreactor with a team of students to sustainably grow algae for
eventual methane collection and energy production. Calculated evaporation rates, algal growth
using spectrometer readings, and optimal air pressure for movement of algal carriers through the
system. Managed participatory scheduling and regulation for algae growth conditions and
environmental parameters.

**Supervisor**: Michael Marsolek, Ph.D. marsolek@seattleu.edu

#### Seattle University Department of Civil and Environmental Engineering

901 12th Avenue, Seattle, WA 98122 United States 09/2016 - 06/2017

Hours per week: 15-25

#### Nicaragua Soil and Water Assessment Tool (SWAT) Model Project

Duties, Accomplishments and Related Skills:

 Proposed a plan to develop and calibrate a hydrologic SWAT model (program extension run on ArcGIS and QGIS) of the Ochomogo Watershed in Nicaragua. Identified main sources of sediment in the watershed and drew up a suggested management plan, for the use of Nicaraguan counterparts, based on collected data.

Supervisor: Josephine Archibald, Ph.D. josephine.archibald@humboldt.edu

#### Seattle University Department of Civil and Environmental Engineering

901 12th Avenue, Seattle, WA 98122 United States 04/2016 - 08/2016

Hours per week: Preparation: 5-10 hours. In the field: all day

#### **River Monitoring Research Intern**

Duties, Accomplishments and Related Skills:

 Developed low-cost turbidity, precipitation, and pressure transducer sensors and installed them in the Rio Ochomogo, Nicaragua. Collected hydrologic data including stage data, turbidity, flow velocity/discharge, etc. Provided technical assistance to two environmental science/engineering professors in the field including sensor building and waterproofing, programming, and site selection.

**Supervisor:** J. Wesley Lauer, Ph.D. lauerj@seattleu.edu

#### **Education:**

Seattle University Seattle, WA United States Bachelor of Science Degree 12/2017

**GPA:** 3.6 of a maximum 4.0 **Major:** Environmental Science **Minor:** Biology

Studied environmental science with an emphasis in hydrology and ecology.

Academic Reference: J. Wesley Lauer, Ph.D. <u>laueri@seattleu.edu</u> Okay to contact

Cascadia College Bothell, WA United States

Associate's Degree 06/2015

**GPA:** 3.9 of a maximum 4.0 **Major:** Integrated Studies

Attended Cascadia College during junior and senior year of high school in the Running Start program, a dual enrollment program that allows high school students to take college courses on community college campuses.

#### **Additional Information:**

#### **CORE SKILLS**

Program planning, leadership, program facilitation, youth and adult education, grant writing, data analysis and validation, resilience and flexibility in work environments, eagerness to learn

#### **COMPUTER PROFICIENCY**

ESRI ArcGIS Desktop, QGIS, Microsoft Office Suite, Advanced proficiency in Microsoft Excel, Google Scholar, Endnote



### Work Experience

#### **Clinical Medical Assistant**

CareNow Urgent Care/ HCA Healthcare - Mesquite, TX August 2021 to Present

Obtaining vital signs, health history, and chief complaints from patients. Giving injections, medications, dressing wounds, applying splints and braces, and obtaining test samples. Responding to emergency triage patients, treating burns and lacerations, performing EKGs, calling EMS, discharging patients.

#### Student Assistant

Comparative Medicine Program - College Station, TX July 2020 to May 2021

- Working with animal vet technicians to complete various tasks in the central animal research facility at Texas A&M University
- · Updating animal health charts
- · Sterilizing lab and operating rooms

#### **Merchandise Associate**

Target Store - Dallas, TX June 2020 to August 2020

- · Assisting guests with questions
- · Stocking shelves with merchandise
- · Ensuring store sections were operating smoothly and providing support when needed
- · Ensuring store appearance was kept clean and organized
- Unloading and organizing merchandise early mornings

#### **Student Researcher**

UT Southwestern Medical Center - Dallas, TX June 2019 to August 2019

- Research intern for 10 weeks at Dr. Takahashi's lab for Circadian Rhythm (> 40 hrs/week)
- Designing and implementing experiments in Dr. Joseph Takahashi's lab to test malarial circadian rhythms alongside a team of research professionals.

#### Student Research Assistant

TAMU Health Science Center August 2018 to May 2019

• Assisting Dr. Shetty's lab with microscopic imaging, cell counting, tissue and slide preparations (10 hrs/week)

#### **Target Team Member**

Super Target Store - Dallas, TX June 2017 to August 2017

- Assisting guests with questions
- Stocking shelves with merchandise
- · Ensuring store sections were operating smoothly and providing support when needed
- Ensuring store appearance was kept clean and organized

#### Host

IHOP - Dallas, TX June 2016 to August 2016

#### Education

#### **Bachelor of Science in Bioenvironmental Science**

Texas A&M University - College Station, TX May 2021

#### Skills

- Experience working with medical and research professionals (Ph.D., M.D., R.N., PA)
- Experience with research techniques: microscopic imaging, optical fractionator-based cell counting, flow cytometry, data analysis, mouse care, parasite load quantification
- CPR/AED/First Aid Certified
- · Working/multitasking under pressure and in stressful situations

#### Languages

- · Farsi Fluent
- English Fluent

#### Certifications and Licenses

#### **National Certified Medical Assistant**

#### **Basic Life Support (BLS)**

May 2021 to May 2023

#### **Publications**

Oral Nano-Curcumin in a Model of Chronic Gulf War Illness Alleviates Brain Dysfunction with Modulation of Oxidative Stress, Mitochondrial Function, Neuroinflammation, Neurogenesis, and Gene Expression

http://www.aginganddisease.org/EN/10.14336/AD.2021.0829